

P A N A C E A;
O R
The Universal Medicine,
B E I N G
A DISCOVERY
of the
Wonderfull Vertues
O F
Tobacco
Taken in a Pipe,
W I T H
Its Operation and Use both in
Phyſick and Chyrurgery.

By D^r *E V E R A R D, &c.*

L O N D O N,
Printed for *Simon Miller* at the Star in *S^t Pauls*
Church-yard, near the West-end, 1659.

B/

YMEV



I

Sr
Al

M.
M.
M.
M.
M.
M.

To
P

R



and



TO THE
Right Worshipfull

<i>Sr James Drax,</i>	<i>M. Newman,</i>
<i>Alderman Ma-</i>	<i>M. Phillips,</i>
<i>niford,</i>	<i>M. Boggs,</i>
<i>M. Wainright,</i>	<i>Capt. Fox,</i>
<i>M. Jeffreys,</i>	<i>Capt. Price,</i>
<i>M. Allen,</i>	<i>Capt. Read,</i>
<i>M. Stacy,</i>	<i>Capt. Pensax,</i>
<i>M. Fenkins,</i>	<i>Capt. Buller,</i>
<i>M. Pet,</i>	<i>Capt. Odiam.</i>

A N D

To all the worthy Merchants and
Planters of *Tobacco*, for and in
the *WEST-INDIES*,
and *AMERICA*.

Right Worshipfull,

IT is well known, and
confirmed by certain
Experience, that by
the great care, cost
and charges of the Merchants;
A 2 and

The Epistle

and by the great industry and labour of the Planters of Tobacco in the *West-Indies*, multitudes of people that are under the present Government, are plentifully maintained, and very many of them get great estates for themselves and families, and the Customs of it are no small profit to the Commonwealth. I think there is no one kind of forreign Commodities that yeelds greater advantage to the publick; and there is scarce any to be compared with it. Wherefore I dedicate this short History of Tobacco unto you, that are the Merchants and Factors in it, wherein you may at your leisure observe some thing that may conduce to your further content, if you please but to take notice of the great virtues it hath both in Physick and Chyrurgery. But if we reflect upon our Fore-fathers, and that within
the

Dedicatory.

the time of less than one hundred years, before the use of Tobacco came to be known amongst us, (For Captain *Richard Grenfield*, and *S^r Francis Drake* were the first Planters of it here, and not *S^r Walter Raleigh*, which is the common error) we cannot but wonder how they did to subsist without it; For were the planting and traffick of Tobacco now hindred, millions of the Nation, in all probability must perish for want of food, their whole livelihood almost depending upon it. So many *Druggists*, *Grocers*, *Tobacco-shops*, *Taverns*, *Inns*, *Ale-houses*, *Victuallers*, *Carriers*, *Cutters* and *Dryers of Tobacco*, *Pipe-makers*, and the like, that deal in it, will prove no less.

The necessity of Tobacco, and maintaining the Plantations of it, is almost as great, if we do but consider who they are that buy it only for their own drinking, and

The Epistle

cannot abstain from it. Sea-men will be supplied with it for their long voyages: Souldiers cannot want it when they keep guards all night, or are upon other hard duties in cold and tempestuous weather: Farmers, Plough-men, Porters, and almost all labouring men plead for it, saying, they find great refreshment by it, and very many would as soon part with their necessary food, as they would be totally deprived of the use of Tobacco. The Nobility and Gentry, who find no fault with it, but that it is too common amongst the Vulgar, do ordinarily make it the complement of all their entertainment, and oft-times all their entertainment besides is but a complement. Scholars use it much, and many grave and great men take Tobacco to make them more serviceable in their callings. Tobacco is grown to be not only the
Phyick,

Dedicatory.

Phyſick, but even the meat and drink of many men, women and children. In a word, it hath prevail'd ſo far, that there is no living without it; that notwithstanding the vaſt Plantations of it in the *West-Indies*, all our corn-fields would ſoon be turned to gardens of Tobacco, were not men reſtrain'd from it by the Civil Magiſtrate. It is like *Elias* Cloud, which was no bigger at firſt than a mans hand, that hath ſuddenly covered the face of the earth: The *Low-countries*, *Germany*, *Poland*, *Arabia*, *Persia*, *Turky*, almoſt all Countreys drive a Trade of it, and there is no commodity that hath advanced ſo many from ſmall fortunes to gain great eſtates in the world. *Don Utaſco* of *Amſterdam*, who, as I am told, never knew his own name nor parentage, by ſelling Tobacco, hangs out the ſign of *Don de Melasco*, under whom he

The Epistle

was once a poor souldier, and is called now by his Generals name. But though they that traffick in it seldom miscarry, yet others by the intemperate taking of it, have somtimes brought themselves and great estates to ruine by it, in whom this Martial Plant hath occasioned more diseases of the mind, than it can cure diseases of the body, though it be of very great use in Physick.

I confess that Tobacco is a plant of Gods making, and it hath many admirable faculties in it, and the fault is not in the leaf, though it be sophisticated by some, and inordinately abused by others; yet there is some reason to suspect, that there hath been much of the cunning of the Devil, and of mans perverse understanding imployed in the large propagation of it, because that *Christians, Jews, Turks and Infidels*, almost all mankind, who

Dedatory.

who are naturally so averse from all that is good, and prone to nothing but mischief, are so much delighted with it. But in my opinion, the providence God intended by discovering this herb to *Christians* amongst the *Indians*, that by their daily commerce, the Gospel of *Jesus Christ* should be made known to those *Heathen* people, who sit in darkness and the shadow of death. The Devil was much afraid of it, as I was enformed by one born in *England* of *Spanish* parentage. For when the *Christians* came first among the *Indians*, and began to convert them to the *Christian Faith*, (as there appeared some symptoms of zeal at the beginning, though it grew soon cold at the sight of gain) the Devil threatned to revenge himself on the *Christians*, by teaching them to take Tobacco, which having once tasted they should never be able to refrain from it. We see indeed that *Christians* are so much affected with it, that they cannot forbear

it;

The Epistle

it; but the Devil seems to be more afraid than hurt, to think that *Christians* now adayes are so zealous of Gods glory, as to make it their aim to withdraw those barbarous people from his service; forasmuch as I can understand they have made this the least part of their imployment, not regarding the purpose of God, nor his dispensations for the saving of mens souls, who descended from *Adam* as well as themselves, and may have a part in the righteousness of *Christ* as well as they; who had they but a glimpse of that light *Christians* have, would doubtlesse bring forth better fruits than *Christians* do, who by their jarring and differences one with another, and by minding so much their own profit and advantage, have given great cause to those ignorant people to blaspheme the name of God, and to abhor the Sacrifices of the Lord. Insomuch that when they were told that the *Spaniards* went to Heaven, they said, *They would*

Dedicatory.

would go to Hell, that they might not be where those wicked Spaniards were. So that it is likely that God seeing *Christians* now unworthy of his service, hath reserved the conversion of that people, untill such time as *Christians* shall be more charitable and more composed in love and unity amongst themselves. I must not tire your patience by writing a Volume upon this subject, lest the portal prove too great for the house. I shall onely speak something more concerning Tobacco. And

First, It is no great friend to Physicians, though it be a physical plant; for the very smoke of it is held to be a great Antidote against all venome and pestilential diseases. It is also singular in Clysters against the wind-Cholick, and therefore King *James* merrily said, *That was the way to take it*: But the Duke of *Souoy* who was so cured by it was of another mind, *The Irish* they are altogether for snuff
Tobacco

The Epistle

Tobacco to purge their brains. The *Indians* swallow down the smoke against weariness, till they fall into an Extasie. The upper Scout of *Amsterdam*, as some report, chews it against all diseases, and likes it better than Partridge or Pheasant. But the ordinary way to suck it from a pipe, and puff it out again, is held the best way to cure Rheums and distillations from the head. It works such contrary effects, that Philosophers contend almost about it, as much as Chymists do concerning Mercury: they cannot certainly conclude, whether it be hot and dry, or cold and moist, for it quenches thirst, and yet is the fittest shoing-horn to draw down drink, and to make men dry; it abates hunger, yet is excellent to provoke a mans appetite to meat: It is a fit companion for mirth or melancholy; it will make one sleep, who wants rest; yet will it keep a Scholar waking in his study, and a souldier upon his guard. It puts Physicians to a
non-plus;

Dedicatory.

non-plus, for it agrees with all ages, sexes and tempers. D. *Venner* in his *Via recta ad vitam longam*, allows any man, be he Cholerick, Phlegmatique, Sanguine or Melancholique, six pipes a day. Wherefore some object, *That it is a vain thing*. I answer with *Solomon*, to are all things else, *Vanity of vanities, all is vanity*. Yet I should counsel no man to take it, who doth not stand in need of it; and those that do, to use it with that moderation as is required in the use of all other things. When thou hast found honey eat not too much of it; *Ubi mel, ibi fel*, where honey is, there is gall; and in every thing in this world there is something to be avoided. Nature her self speaks the same to us with a loud voice in this Tobacco plant, as much as in any thing in the world. For those two ground-leaves that grow upon it, which the *Spaniards* call *Bascheros* must be cut off, and thrown away, they smell and taste so unpleasantly, that should they
be

The Epistle Dedicatory.

be mingled with the rest, they would spoil all. As therefore the Planters are very carefull to cast these leaves away, so should Christians be in the use of all temporal things, to cast away all earthly thoughts and desires that are too near the ground, all that is vicious and offensive to God or man, that all their thoughts, words and deeds may be sweet sented in the nostrils of God, that they may be at length transplanted from their uncertain Plantations here on earth to an everlasting Plantation in Heaven, which is the prayer of him for your Worships, and for all the worthy Merchants and Planters of this Nation, who is

Your Worships

in all Christian duty

F. R.

THE



T H E
P R E F A C E.

I*T is an Axiome of Aristotle in the first Chapter, Analyt. Post. All kind of Learning, and all Discipline proceeds from some precedent knowledge. I suppose that this Axiome belongs to all teaching whatsoever, that is undertaken concerning any matter according to the Rules of Reason, if it be Methodicall and handsome: and if the Philosopher doth not affirm the same, I am certain he doth not contradict it. Wherefore because I am minded to discourse of Tobacco by rule perfectly, I am bound to take great care, that I do it in a fit Method, as I ought to do; and this I shall performe if I do it orderly, as is observed almost by all Authors in almost every*

The Preface.

every matter propounded. First, Therefore I shall briefly Treat of the Etymologic, or Reason of the Name of this Universal Remedy. Secondly, I shall lay down the differences of it. Thirdly, I shall shew the Temperament. Fourthly, I shall teach the time when it must be Sowed, and when gathered. Fifthly, I shall enquire in what place it prospers best. Sixthly, I shall in brief set down the way to prepare the Leaves, which few Men know. Seventhly and Lastly, I shall search into the singular forces of it, and the known proved effects, and shall speak of all Unguents made with Tobacco, Plaisters, Balsams, Liniments, Cerats, Anodyns, &c. I shall discover how to make these to help the Apothecaries, and studious Men, that every one may be able to provide them himself, and when need is he may bring them out, as from a store-house of his own.

PANACEA



PANACEA,

Or The

Univerſall Medicine;

Being a Diſcourſe and

Diſcription of TOBACCO,

With its Preparation and Uſe.

The Reason of the Names.



Ince that Galen. 1.
de Meth. c. 2. & 3.
& lib. 1 ad Thra-
ſybul, ſaith; That
to undertake to know
a thing, without the
knowing of the explication of the Name,

B

is

The Description

is but to labour in vain : It is my part to Discourse first of the Names of this great *Panacea*, and of their first Originals, and who they were that first taught us the use of it, which I shall exactly examine.

Tobacco took the Name from the Name of that Country which is a Province in new *Spain*, in the *West Indies*, or the new World, about Forty four Miles above *Mexico*, the Metropolis of *Hispaniola*. In this lay the Province Tobacco which was under subjection to the government of *Yucatan*, (the *Spaniards* afterward called it the Province of the Blessed Victorious Virgin, because in the Year, 1519. *Ferdinand Cortesius*, Founder of new *Spain*, won a great victory in that place) here was this Noble Plant first found, that Cures almost all Diseases, and from thence afterwards it borrowed the Name. Those of *Peru* call it *Potum*, so do almost all the people that live toward the *Antartick-Pole*, or *Picicelt*, as *Monardis* holds, or *Perebecnuc*, as *Oviedus* will have it (yet this is not the proper name for Tobacco,

bac
Ina
fers
me.
V
N
tius
to
Fra
terw
Cou
Herb
mou
Fran
made
whof
receiv
Men
this
This
1560
Emba
pened
a Priso
such
where
was.
Man w
the Ki

bacco, but is ascribed to some other *Indian* Plant by Authours, and it differs from Tobacco, as it appears to me.

Vulgarly it is called *Nicotiana*, or *Nicosiana*, from D. *Johannes Nicotius* of *Nismes*, who was Counsellor to *Francis* the second King of *France*, and Master of requests afterwards, and of petitions in the Court, who first discovered this Herb to *France*, (as that most famous Knight and Sea-Admirall, *Sr Francis Drake*, about the Year 1586. made it known in *England*) for whose sake it ought to be gratefully received in Memory of him by all Men, unto whomsoever the same of this healing Plant shall be brought. This D. *Nicotius*, when in the Year 1560. he was sent by his King to be Embassadour in *Portugal*. It happened on a day that he went to view a Prison, or rather a work house for such as are punished at *Lisbon*, where at that time the Kings Court was. There a certain Noble *Dutch-Man* who was the chiefeft keeper of the Kings Archives, presented him

B 2

with

The Description

with this Plant, as being a stranger and newly brought thither from the Island *Florida*; The Embassadour gladly received the Plant, and being rare and come from beyond the Seas, and which he had never seen before he takes great care to have it planted in his Garden, for he understood before by hear say, of the great Vertues it had to cure Wounds and Ulcers, it having been often used with happy success.

Wherefore the Fame of this Herb spread over all *Portingall*, and the *Spaniards*, and *Portugals* speak much in praise of it, and it began to be called the Embassadours Herb. Not long after he returning for *France*, preserved some of the Seed of it to *Catharine de Medicis*, Queen of *France*; Shee understanding that this Plant was excellent for curing malignant Ulcers and Putrified Sores, and admiring at it, as being a new Universall Remedy gave it her Name; and after that, all *France* over, it was called the Queens Herb, and *Catharinaria*, and *Medicea*. The *Virginians* call it *Uppowoc*, others call it the great

Pares ma-
fat. in Chi-
ruig.

great *Priors* Herb, because he sometimes Sayling from *France* to *Portugall*, and being entertained at *Lisborn*, by *D. Nicotius*, had many of these Plants bestowed upon him, which he transplanted and made them to grow in their Gardens. Most Inhabitants of *Hispaniola*, call it *Cozoban*. The *Lombards* call it *Tornabona*, because it was still brought into *Italy*, by meanes of the Nephew of *Alphansus*, *Tornabonius*, Bishop of *Burg*. who was also Bishop there himself, but at that time Embassadour with the *French* King. By *Schwenckfeldius*, and others that spake highly of the Vertues of it, it is called the *Sacred Plant*; *Camerarius* calls it the *Vulnery Indian Plant*; others call it *Piperina*: but upon what reason I know not. They of *Lions* call it the *Antarctick Bugloss*, by *Rensalms*, ΒΑΕΙΒΟΧΙΣ. *Dodonaeus* a most famous Writer upon Plants, gives it the name of *Henbane* of *Pern*, but falsely, as I shall shew in its place. *Cordus* gave this name not to Tobacco, but to *Stramonium*. The Reverend Cardinall of *S. Crux*, when he was sent

See Petr.
Martyr,
Dec. 1. l. 9.
Of the
new world.

The Description.

from *Rome* the Popes-Nuntio into *Portugal*, brought it first from thence to *Rome*, and therefore there they call'd it the Herb of *S. Cruce*. Some call it *Sana Sancta*, not without a Catalogue of the great praises of it, fetcht from evident experience. The *Dutch's* and *English* call it *Ta-back*. The *Germans* name it *Heylig Wundkrat*, *Indianisch Wundtkrant*, *Indianische Beinwelle*. Thence the *French Cosmographer*, (who was in that Expedition, which Anno. 1555. *Nicolaus Durandus Villagagnous* made to *Brasil*) in his Book call'd *Antarctick France*, names it *Angoulmoisine*, and boasts that he was the finder, and the first man that brought this Seed into *France*. I know not whether he spake the truth; It seems to me to be an old Wives story. *Fabius Columna* mentions *Arabian Tobacco* different from ours; which we do not know. Read what the most Learned *Columna* hath written in his *Βουκεριον* of Plants that are not well known p. 142. There are many uncertainties in the writings of the *Arabians*, for that Nation hath
but

but
mon
not
they
Wri
mos
dinn
of P
Eg

V
with
narr
bacc

T
fort
are
ny
inw
Stall
time
is g

but a few things of its own, and commonly the *Arabian* Authors have not well set things together, because they understood not rightly the Writings of the *Greeks*. Also the most famous *Herbarist*, D. *Guilandinus*, in his conjecturall synonimas of Plants, calls this Plant *Onosmyos* of *Egineta*.

The Differences.

WE have observed three sorts of Tobacco, the greater with broad Leaves, the greater with narrow Leaves; and the smaller Tobacco.

The first Kinde.

THe broader Lease large Tobacco, hath a thicker stalk, and sends forth shoots from the Roots, that are woody, and are fortified by many small Fibras, they are White, but inwardly Yellow and bitter, the Stalk is as thick as a staffe, and sometimes grows three Cubits high; it is green and hath a thin down over it,

The Description

it is Unctuous especially when it is grown up, and is full of a White Pith, and hath many Leaves; this is Fenced about from a broad Basis of the windings of the stalk, with Leaves resembling great *Comfrey*, but they are bigger, and about the middle more large, and as it were branched or Gibbous, and by degrees they grow to be very sharp pointed, they shine with a watry green, having no pleasant smell; they are full of juyce, and are smeered over almost with a clammy Humour, so that it will stop small Creatures which sit upon them; they tast sharp with some clamminess; Amongst the frequent Branches of the Leaves, the Flowers come forth single out of the indented Leafy cups, standing severall upon a firme stalk, and from a narrow Basis, towards the upper part they are by degrees dilated as it were into a bordered Pentagon, resembling a Trumper, being White and pale Red, (which is called *Carnation Colour*) they Blush; In the middle whereof are five threds that compass about the stalk, that is of a Pale Green, and sticking forth, when

when
hollo
end
full
black
seed
this
this
but
con
ser
Co
the
ob
wi

in
f
b
t
l
c
l

when these decay, there follow the hollow long Cups, that something end in a point at the top, that are full of very small dusky or reddish black, but at first with green round seeds. The Herbalists vulgarly call this the Male Tobacco. Some think this is *πικτυς*, *Dioscorides* speaks of; but I know not how those words can concern Tobacco. If conjecture may serve, that *πικτυς* seems to be great Comfrey from the likeness of it, as the famous and learned *D. Bauhinus* observes in his *Synonymis*, where-with he adorns *Matthiolus*.

The second Kind.

Great Tobacco with narrow leaves hath woody stalks, cut in many jags, and hairy, with infinite fibras; the stalks are about a foot and half, plaited, green, full of branches, to which by a small stalk are fastned leaves like to Nightshade, which is called *Bella Donna*, yet somewhat larger and greener, downy, thick, full of juice; the flowers on the tops of the stalks and branches are purple colour,

colour, and represent a round narrow Cup toward the basis, and are of a pale green. The husks succeed the flowers, and are rather long than round, and at the top they have a long furrow, in the middle whereof there comes forth a thick little point, but very short and red. From the extream part of each furrow there is drawn a trench to the basis, which is apparent in a yellow circle. The seed contained in it is small and yellow.]

Aegidius Everardus saith, That this kind often springs from the seed of Male Tobacco. For (saith he) if any of the grain of Male Tobacco fall to the ground, when it swels with seed, namely, to the ground, where Tobacco grew before; this narrow leav'd Tobacco will doubtless grow up there the next year, and this is called Female Tobacco. Also if you sow the seed of Male or large leaved Tobacco in ground not hot enough, or which is barren, it will produce the Female, for the Male, in such abundance, that you will hardly get it out again, but it will yearly spring of it self. *Ren-*
almus

almus calls this sort *μυζόν*, because the leaves are born up by a small stalk, which the *Greeks* call *μυζόν*. *Pennius* calls it, *Nicotiana minor*. *Lobelius*, *Tobacum minus*; *Herba Sana sancta minor*. The *French* call it, *Nicotiane Petite*. The *Dutch*, *Kleyne Taback*. The *Germans*, *Schmalblaterch*, *Indianisch Wundtkran*.

The third Kind.

THE third sort, called the lesser Tobacco, is but a foot and half high, and farre lower than the former. The root is white, going deep downwards, the length of a span, as thick as ones finger, and is much set about with leaves on the sides. The stalk is round, fat, with fine down upon it, of a pale green, upon which the leaves are green, somewhat round, fat, full of juyce, somewhat hairy, not unlike to mad Nightshade, but they are greater and more white. The flowers are of a yellow pale colour, standing in dented leafie cups, farre smaller than those of great Tobacco, they are hollow, and are unfolded

unfolded into five blunt once divided edges, and when these fall, there remains roundish heads, that are full of pale wan seeds, like to the small ones of the former Tobacco, but they are bigger and round. *Bauhinus* calls this kind yellow Henbane. *Matthiolus* calls it, the third sort of Henbane. At *Lions* they call it, black Henbane. *Dodonæus* will have it yellow Henbane; so will *Lonicerus*. *Gesner* and *Camerarius*, *Tabernmontanus*, calls it Henbane of *Peru*. *Gesner* calls it *Priapaja* of the Garden, and *Casalpinus* a kind of *Tornabona*. The *Neotericks* call it smaller Tobacco like Henbane; and at *Lyons* the lesser Tobacco. The *Germans* name it *Wundbilsam*, *gelb Wundtkraut*. *Lobelius* calls it a doubtfull kind of yellow Henbane, with leaves of Nightshade. But I with the most learned Herbalist *Dalechampsius*, do not think this herb can be referred to Henbane, for their faculties are quite contrary, for the seed of this tastes sharp; as also the leaves, if you chew them they are a long time of a hot taste in your mouth, and

and it cannot be extinguished, but in long time; and this is a great argument of heat. Wherefore the famous *Donanens* did not well to call it Henbane of *Pern*, nor any of the rest, for it cannot be referred to any kind of it, for the leaves are notably acrimonious, which argues a hot and no cold temperament, like to Henbane. Noble *Clusius* calls this the fourth kind of Tobacco.

The Temperament.

WHat concerns the faculties of the Male Tobacco (for in this Discourse I chiefly treat of that) there is great dissention amongst learned men. *Monardes* holds it to be hot and dry in the second degree, and moderate in the rest; and *Dalechampsius* holds the same. *Casalpinus* saith, it is hot in the first, and dry in the third degree. *Edward Dons* an *English* Writer, holds it to be hot and dry almost in the third degree. Others deny it to be hot, but say it is extream cold, because the smoke troubles the mind, and brings a man almost

almost into an Extasis ; and therefore they referre it to some kind of Henbane, as I gave notice of before. *Banbinus* he sayes as much, moved thereto by its stupefying quality, and likeness of the forme that it hath with Henbane. *Mercatus* saith, it is extream hot. *Jacobus Cohorinus* dares not give his opinion, but puts it off to some other time. *Lobelius* thinks it is hot intently in the second degree; and he answers *Dodonæus*, that it bites in taste, and is hot in the mouth; yet *Dodonæus* afterwards changed his opinion. I with *Renealmus* say, that the green leaves are hot and dry in the second degree (which temperament the Sunne gives to them, as it doth to the root and stalk by its heat, and the Moon gives them their color) but when they are dried, they are hot and dry in the end of the third degree. Tobacco is acrimonious, and causeth thirst, troubles the mind, makes the head heavy, which could not be, unless some hot vapour flew up, and fill'd the brain. They do but sport, that say it is cold, for it hath all symptoms of heat.

The

The Time.

It is sowed in the Island *Hispaniola*, as also in other hot clymates about Autumn, where almost all the year long it brings leaves, flowers and buds. It will grow with us, if continual care be to help it. It is not sowed with us before the warm Spring, that is, about the Ides or Nones of *April*, as the weather is hot; for it is chill, and at the first fall of the leaf or cold weather it fades, wherefore it must be well fenced from cold. Noble *Clusius* thinks it should be sowed in *August* or *September*, because the small seed lieth very long under ground before it spring forth, and being sowed in *March*, or in the Spring, in *August* it will bring flowers, and now and then seed. But we find by experience, that the seed of Tobacco sowed in *April*, in our Countrey, springs forth more happily and sooner, and the stalks are more fruitfull and longer, and the leaves are farre greater and fatter, than when the seed is sowed in *September*.

tember. The Plant is gathered, when the Sunne is in the 18, 19. and 20. degree of *Leo*. Being once planted, when the seed comes to be ripe, it will sow it self plentifully of its own accord in many Gardens and Fields, whether it is carried by force of wiuds. It is sowed in the increase of the Moon, and cut when the Moon decreaseth. The seed is dedicated to *Aquarius* and *Mars*, being very hot, which quality it hath from *Mars*. In Winter it can hardly be kept but in pots or wooden chests, or little baskets made with osiers, and that in Panteries, and places under ground, or hot houses, or floweres, and so it may be preserved without hurt for three or four years. *Casalpinus* would also have the stalks planted, yet *Basilus Beslerus Eistettenfis* saith, he tried that in his Garden, but it proved in vain.

The

IT Be
well
clay
grav
char
dung
ashe
that
mak
fecti
and
espe
whe
L
it b
bro
he n
pull
(fo
ther
of
with
mak
or t
Ox

The Place.

IT loves a fat and pleasant soyl, the
Bed to be plain, smooth, black,
well dressed; it loves not sandy nor
clay ground, nor doth it delight in
gravel; wherefore it is no small
charge, if every other year it be
dunged with Oxe dung; some sift
ashes very fine and mingle them, but
that comes forth very slowly, and
makes it long before it come to per-
fection. It wonderfully desires water,
and therefore it must be watered,
especially in such dayes as are very fair
when there falls no rain.

Let the Lands upon which you sow
it be long, and about three foot
broad, that by the furrows between
he may pass on both sides, that must
pull or cut off the superfluous leaves,
(for otherwise these will suck to
themselves the force and nutriment
of the greater leaves) dig the earth
with your finger, or a little stick, and
make a hole in it, and put into it ten
or twelve grains, and put a piece of
Oxe dung both at the botom and top

C

of

The Description

of them. Do not put fewer seeds into one hole, for they are so small, that they would be choaked and lost. It hates cold exceedingly (as I told you;) and therefore you must raise a wall with clay or stone upon the North side of it, that it may lie open to the South Sunne, that so in Winter it may receive some warmth, for then it must be fenced and covered with mats and straw.

The Preparation of the Leaves.

IT may at first be sowed in an open field, and when it is grown forth to the height of the leaves or tender branches of Coleworts, it may be transplanted, and be set apart in the foresaid long beds, three foot broad, and they must be planted in that order, that every plant may stand three or four foot off from another, least when the plants grow big, the greater leaves should touch and hurt one the other, and this would prove to be very great damage. But when they are growne so great that the flowers begin to peep forth, presently
before

before the flowers open themselves, you shall cut away all the young shoots and tops, with all the small twigs on the sides, and the lesser leaves that use to grow between the rest. For Tobacco must not bring flowers or seeds, if you intend to preserve the force of it entire. Moreover at the lower end of the stalk of it there are commonly two leaves found (the *Spaniards* call them *Bascheras*) which take away the pleasant taste of Tobacco, if they be mingled with the others. You shall therefore be sure to cut off these with the rest that are superfluous, and do not use them in any use with the rest (for they tast ill, and do not smell well) and leave but ten or twelve great leaves upon the stalk commonly, when the foresaid small-leaves with the shoots on the top, and the two lowest, and such as are to be rejected, are cut off. But have an especial care that the Tobacco you desire to sell into these *German* Countreys, *England*, or *France*, you suffer it not to runne to flower, for all the forces of

The Description

it will be lost when it flowers.

Moreover you shall mingle and bruise together the foresaid smaller leaves cut off with the small sprouts and buds of the flowers, (utterly rejecting those two greater leaves at the bottom called *Boscheras*, as being good for nothing, and unprofitable) and having pressed forth the juice, you shall boyl it in the best sweet strong *Spanish* Malago wine (others adde to it *Dants* Ale, and you shall skim it well, and when it is well purified, you shall put in good store of salt, that the juyce may be as salt as Sea water, then cast in a good quantity of Anni-seed, and Ginger beaten into very small powder, and let it boyl one hour longer, then let it stand, that the dregs may settle to the bottom, and pour off all that is clear.

You must keep this juyce thus boyled (the *Spanish* call it *Caldo*) in a vessel close stopt, that the forces may be kept within, untill such time as the greater leaves, which you left upon the stalk (for in these resides all the strength of the plant) are grown
ful

full ripe, which when they are come to, you shall presently cut them off next to the stalk; and you shall set the foresaid juyce or *Caldo* upon the fire, and boyl it almost (yet it must not boyl, for should it boyl, the strength of it would flie away to nothing) and you must dip all the said leaves in that juyce severally. But if it be too troublesome to dip all the leaves in one by one, you must spread a woollen cloth on the ground upon a floor, or in a barn, or place where the wind hath no power, though it be in the open air; and upon this you shall lay a row of leaves, as close as to touch one the other, and upon this rank of leaves you shall lay another rank of leaves in the same order, yet not wet in the foresaid juyce; and taking into your hands a great watering vessel, which you must dip into the said juyce or *Caldo*, you shall water by sprinkling all the foresaid leaves, and those being watered, you shall lay upon them a third and fourth rank, and so forward a fifth rank, and upon that a sixth of new leaves, sprinkling all the rows with the fore-

The Description

said Ewer, or with a brush, still observing the same order, untill such time as the leaves thus disposed in order, rise to be a foot and half high. Then you must cover the leaves, yet hot with the liquor, newly sprinkled upon them, with other woollen clothes, that all the rows of the leaves may hold their former heat and lie to ferment. But if that heat or fermentation cannot be procured by those woollen clothes covering the leaves, you may lay Horse dung upon those clothes, to raise the heat, to cherish the leaves, and make them stand in a constant fermentation. But that they may not grow over hot, you must often look upon the leaves, untill they change colour. And if by the heat they begin to look any whit red, and to appear so (which may be seen, if the leaves be held against the light) it is time to uncover the leaves, and to take the coverings away; for being too much heated, they would grow black, which is a sign of burning, and of corruption, and there must be principal care taken that that befall not, for this

this is the chiefest thing to be observed.

Tobacco being thus warmed and fermented, the foresaid leaves must be hanged up with small packthreads, thrusting the needle through the greater nerve of the leaves, that is on the backside, and so they must be hanged up in a windy place, but not very high, where the Sunne shines; for by the Sunnes heat all their forces would vanish. When the wind hath dried them enough, they must be bound in bundles, binding them with cords as hard as you can, so that each bundle must be as great about in the circumference of it, as a great *Spanish Daller*; but above all, take care that they be most closely bound together. The leaves of Tobacco thus prepared, must be diligently and closely pack'd in vessels, thrusting them in as much as you can. And by this preparing and preserving of Tobacco, it will have excellent force and vertue.

Note (in Spanish or Malago wine) This way of preparation is of later time, and invented by the Spaniards for the use of themselves and strangers. For it is probable that the Indians, that are the Inhabitants (untill such time as Wine was brought unto them from other parts beyond the Seas) used Wine of Dates, or of Cocos, or some other liqueur, (not to say piss, which is reported of them to their disgrace) to prepare this juyce or Caldo: also the use of Aniseeds is from the Spaniard.

To stand constantly to ferment) We say Broyen, This signifies a moderate heat, next to strong heat, yet not come so farre as to burne, but onely to foster and ferment. Such a heat Depilatories bring to the parts, and Birds to their egges, when they sit to hatch their young. The Egyptians produce such a heat in their Ovens, when they by Art hatch abundance of Hen Egges, as Bellonius observes.

Some

Some despise the use of Tobacco that grows With us, yet Experience teacheth us that our green Leaves Will cure Wounds, Ulcers, and other Diseases, sooner and more certainly, than the dried Leaves brought from the Indies; It is credible that those dried Leaves coming so farre, have lost great part of their strength oft-times. Others there are that maintain that our Tobacco Leaves dried and prepared after the Indian manner, are more effectually here, than the Indian Tobacco, because that our Leaves be they what they Will, agree better With our temper, and We can have the choice of the fresh Leaves better than of those that are brought to us from other parts, Whereof the greatest part is to be suspected, as being most frequently Sophisticated, (Agrippa lib. de Vainitate Scient. c. 84) saith, Adulterated, or such as are to be rejected, or are Suffocated in the Ship in the Passage, or Sobbed in the Water, or corrupted With age, or not gathered in fit time and place, Whereby there may be danger. The same Author saith Well, it is folly to fetch out of India what We have plenty at

at home, not being contented with our own Land or Sea, preferring Forraign Commodities before those of our own Country, things costly before those that are cheap, and things hard to come by, before such as are easie, desiring to fetch them from the Worlds end, &c.

At this day in Zeland there is a Merchant that soweth yearly about five Acres of ground with Tobacco Seed with great cost, and the Plants that grow he dresseth after the Indian manner, he drieth and prepareth the Leaves as the Indians do, and he sels them every Where, which hitherto hath brought him no small profit. And now almost ten years, the use of this Tobacco hath so prevailed here, that men do not much care for Virginy Tobacco, or what comes from other Countries.

The Vertues:

Tobacco,
an Anti-
dote to
poyson.

THE Spaniards have learned that Tobacco is an enemy to the most deadly Poyson that the *Cannibals* were wont to dip their Arrows and Darts in. It happened that some *Cannibals*

Can
John
and
then
wer
dian
kille
(wh
on t
wer
thei
bac
bru
pai
Syr
We
cor
cur

Ki
an
wo
He
pu
an
we
m
bo
D

Cannibals Sailed in their boats to *St Johns* Port, to shoot all the *Indians* and *Spaniards* they could find and kill them with their Arrows, when they were Arrived they wounded some *Indians* and *Spaniards*, and some they killed. These wanting Sublimate (which they were wont to strew upon their Wounds in such Cases) they were taught by an *Indian* to annoynt their Wounds with the juyce of Tobacco pressed forth, and to lay a bruised Lease upon them: The pains presently ceased, and all those Symptoms which use to attend such Wounds, the Poyson was quickly conquered, and the Wounds were cured.

It chiefly opposeth Hellebore; the Against King of *Spain* would needs try this, Hellebore. and commanded a Huntsman to wound a Dog in the throat, to strew Hellebore into it, and after that to put in plenty of the juyce of Tobacco, and lay on the bruised Leaves; this was done presently, and the experiment was made, the Wound being bound up, in a very short time the Dog was recovered, which made them
all

all to wonder at it.
 AHistory. I shall here adde what *Ædignus Everhardus*, reports concerning his Panacæa; It fell out that at *Antwerp* one gave a Gentle Womans Cat that was somewhat fierce Poyson to drink; The Cat run madding up and down, trying but in vain to vomit up the Venome. The Gentle Woman thought of a way how to wrap up a Lease of Tobacco bruised in butter, and to thrust that down the Cats throat, this was done, and the Cat soon cast up the Poyson and escaped.

It staies
 hunger
 and thirst.

It is worth observing what the most Learned *Monardes* Writes, that the *Indians* do stop hunger and thirst by the use of Tobacco in this fashion. They burn some shels of shell Fish of the Rivers, and then break them like Lime, they take as much Tobacco Leaves as of this Lime, and they chew them untill they come into one Lump, & of this they make Trochesks greater than Peas, and they dry them in the shade, and keep them for their use, when they journey in desert places where they cannot easily come

come by Meat or drink, they put one of these Pellets betwixt their lips and lower teeth, and they suck it, and they swallow down the moisture that comes from it instead of meat and drink, when that is spent they take another. This way they will live without Meat or Drink for three or four daies, and be never weary or lose any strength; for by continuall chewing of these Pellets they draw Flegmatique Humours from their Brains, which their stomach digests into nutriment for want of better food. *Pliny, l. 7. c. 2.* Reports See Strabo lib. 15. & Cal. Rhodigin. lib. 24. c. 21. that at the furthest part of the *Indies* Eastward, toward the Fountaine of *Ganges*, there are men called *Astomi*, that want mouths, and live only by the Aire, and sweet smells they draw in by their Nostrils; they have neither Meat nor Drink, but they live only by the sweet and fragrant sents of Roots, Flowers, and wilde Apples: which could not be unless they were truly nourished: for life and nourishment are almost all one. *Johannes Alexandrinus* opening that place of *Hippocrates sexto Epidemio-*
rum,

Laert. l. 9. de vit & morib. Philof. rum, saith, that Democritus the Abderite a Philosopher (when the Feasts of Ceres was nigh, being requested that he would not pollute his house) lived

onely with the vapour and sent of Honey for four daies. This is the opinion of some men, from whom he relates it, but others say it was done by the smell of new bread hot from the Oven, *Oribasius, l. Aphor. Com. 12.* mentions the same thing, saying, *The Philosopher relates that one Man lived forty daies by the sent of Honey.*

Valleriol. lib. 2. locor. committu.

Cælius l. 24. cap. 21.

But here is a most notable mistake to put 40 for 4. but by the figures it might be quickly overslipt. Also we read in the Book that hath that Title, who ever was the Authour, that *Aristotle* lived for sometime onely by the smell of an Apple. Some there are that dip hot bread in good Wine and apply it to the Nostrils of sick people; and if we apply it likewise to the Temples and sides, it will very much restore strength. Also

Ferrus l. 9. Meth.

Conciliator Aponensis reports that he used to restore his life, when he was dying, with Safron and Castoreum bruised and mingled together with

Wine,

Wine, and that he gave that composition to old people, and it did them as much good by smelling to it, as by drinking it. But these are no wonders, for as by Meat and Drink, whatsoever of the solid substance is wasted, is repaired again, so by Ayre and smoke is regain'd what is spent of aeriall, and moist substance. If therefore Ayre and smoake only, (which is nothing else than a thin substance and aeriall quality) do nourish, (as *Galen* teacheth elegantly, *l. 1. de Sanitat. tuend. c. 2.*) much more will an Odoriferous quality perform this, when it is mixed with a quality that is friendly to nature. Al-
 to *Mathislaus* after *Theophrastus* reports that the *Scythians* will be content with *Licoris* only for ten or twenty daies, and desire no other Meat or drink.

Whether
the smoke
of Tobac-
co can
nourish.

Object. 1. Truly for the Negative part very many Arguments may be brought, as that of Aristotle, *2. de Anima, c. 3.* Where he saith, that touching is the sense of Nutriment, as if he had said, that aliment, as it is tasted, is the Object of touching, for tasting

is a kinde of touching, wherefore smoke being not to be touched cannot nourish.

Object. 2. Again, Nothing can give nourishment to a body, unless it first concocted in the Stomach, Liver, and Spleen (as Galen saith, 1. de temper. c. 1.)

Object 3. The same is the matter of Nutrition and Generation of the same, (Galen 1. de sem. c. 16.) wherefore Man being not Born of smoke, cannot be fed by smoke. Many more Arguments may be urged.

Ans. We answer that smoke may be understood two waies. First, Formally, and then it is an insensible quality different from the first qualities, yet resulting from the actions of them. Secondly, Materially, that is for the substance it is inherent in, and that is Tobacco here. Now this is hot and dry, to be considered of for its heat and thin substance: I say then that an Aromaticall sweet smell doth refresh the forces, and strengtheneth the brain, heart and stomach, for it is a most welcome quality to these parts, and therefore it preserves their

thei
the
ed
rati
swe
Are
A
mul
sum
than
and
can
nou
S
at a
Con
is m
rish
Th
the
thin
hate
rece
and
len
and
Tb
fir
Me

their temperament and substance; and the vitall and animall spirits are renewed and made most fit for natures operations, by a smoke joyned with a sweet sent, and sucked in with that Aromaticall Vapour.

Apposition and Fasting together, Another question. must go before Nutrition, and this sume seems to be to thin and simpler than that we can imagine it can glew and fasten any where : therefore it cannot be said to be the matter of nourishment. *Arg. 1.*

Secondly, Water cannot nourish at all, (4. *de usu part.* and 3. *acut. Com.* 17.) Therefore smoke that is more thin and unmixed cannot nourish, and Galen saith 10 *Metb* 2. 9. *That the Liver receives no profit by the Ayre that is drawn in, and of things we Eat and Drink, the Liver hath less profit than the stomach; yet it receiveth some benefit as it is manifest;* Confirmation. and that reason is confirmed by Galen's Doctrine, 3. *de usu part.* c. 1. and often elsewhere, when he saith, *That the common, and greatest, and first way of nourishment is by the Mouth, and from thence the food*

is carried to the Stomach, as to the common Store-house for all the parts, and set in the midale of the living Creature, where being once concocted it penetrateth to the liver to be turned into Blood, whereby all the parts are fed; but this smoke is not suckt in by the liver to be concocted into Blood therefore it cannot nourish.

For the
other side.

But Hippocrates may be produced for the other part, *lib. de Aliment*, where he saith, that an Aery smoke drawn in by the throat may nourish, his Words are, *The beginning of nourishment are, the Ayre, Nostrils, Mouth, Throat, Lungs, and Breathing, &c.*

Not

To untie this knot, observe, first, That a man being in continuall motion, and consisting of a double matter, namely Earthy, and Watry, which forms the solid and fleshy parts, and of an Aery and fiery, which forms the Spirits, another principle of life; Hence it is that he wants a double matter to repaire the decayed and dissipated substance of them both; Namely, Meat and Drink to restore Earthy and Watry

try part consumed, but Fire and Water to make up the spirituall part, as *Galen* doth plainly teach, 1. de *sani-
tate*, c. 2.

The second Note is, That though *Hippocrates* doth say, (*lib. de Aliment*, now cited) That the Spirits are nourished, yet they are not truly nourished, since they are not the true and living parts of the body, nor have they any naturall faculty to nourish them, whereby they may change Aeriall matter like themselves, into their own substance, but they are perpetually bred fresh, by the most powerfull force of the heart and strong heat, tempering the thin vapours of blood with the Ayre that is drawn to it. But *Hippocrates* saith they are fed, because the life is perceived to be very much recreated and refreshed, when the proper instrument is refreshed, and again, when the Spirits are decayed, the life deprived of its proper instrumentt decays also. Wherefore the Spirit is bred, not of its own faculty, but from that which is inserted into all the principall parts; and they are bred

the same way almost as the Chylus is made in the stomach, and blood in the Liver; yet not so as if the Spirits as well as they, were the matter of nutriment, for they are so thin and subtile, that they can stick and joyn to no part.

Answer. These things being first laid down it will be easie to answer the contrary Arguments.

1. To the first I answer, That the Ayre's not joyning needs not trouble us, nor the unfitness of it to nourish. For we do not think that the Ayre doth nourish the solid and fleshy parts really; but being so mingled as I said, and concocted by the strong heat of the heart, I maintan it doth goe into the substance of the Spirits.

2. To the second the answer is easie. For though the water alone be unfit for nourishment, yet mingled with other things that nourish, we find it gains a nourishing condition.

Answer to the Confirmation. I answer to the Confirmation, That it is true that Meats and Drinks can indeed be converted into nourishment, no where but in the stomach
and

and liver, but I deny that the Ayre wants those Transmutations. But to return whence I digressed;

Thomas Hariot in his description of *Virginy*, reports that Tobacco is so much esteemed amongst the barbarous people, that they are perswaded their gods take delight in it also, wherefore they kindle sacred fires, and instead of Sacrifice they cast this in powder, and when they sail, they will cast the powder of it into the Ayre, and Water. They observe the same custome) saith the same Author) making strange mimick apish gestures (sometimes stamping the earth with their feet, sometimes leaping, sometimes rejoycing, clapping their hands, and lifting them up on high, sometimes looking towards Heaven, and speaking incongruous words) if at any time they escape any great danger.

The esteem of Tobacco amongst the *Barbarians*.

I cannot let that pass, that you shall hardly meet any one of these *Barbarians* who hath not hanging about his neck a small bundle of Tobacco, with pipes made of Palme tree Leaves, and who also taking with his

companions, doth not draw the smoke of it as through a tunnel, by his mouth and Nostrils, untill he be almost in an extasie.

It takes a-
way wea-
riness.

There are some of them who to take away weariness, and to be refreshed in their labours, make use of this smoke, and we found saith *Monardes*, that by their example, our servants and the *Moors* that came into the *West-Indies* from other parts, would do the same, for being weary by much leaping and dancing, they draw it in by their Mouth and Nostrils. And the same thing befalls them as doth the *Indians*, for they lye as if they were dead for three or foure houres; after this they are lusty and are better able to endure labour than they were before. And they take such delight in it, that they will now and then go out of mens sight to take it in pleasure, though they be not tired. Sometimes they grow so mad by it, that they will kill their Masters, who are carefull to burn their Tobacco, that they may take from them the occasion of this idle pleasure. What need more words, I saw saith *Monardes*,

Monardes, our servants and the *Moors*, who were not suffered to be drunk with Wine, to make themselves drunk with this smoke, wherein they take no small delight, and they boast that it takes all wearinesse from them, and that they suffer no hurt nor damage by taking of it.

Reserve to this what *Alexander ab Alexandro*, l. 3. c. 11. hath left to Posterity, that the *Scythians* when they desire to be drunk, and abstain from Wine, that they may not break the custome, they cast bundles of Herbs into the fire, and suck in the smoke, and so become as drunk as if they had dranke Wine. So it is a tradition concerning the *Tbracians* that at their banquets they go about their fires, casting the seeds of Herbs into the fire, and the fume of that will make them like those that are drunk, and they besotted as if they drank Wine, even like those that tasted the juyce of *Nepenthes*, who supposed sorrow to be removed by it. Also the *Babilonians* would make themselves so drunk by burning

The *Scythians* will be strangely drunk with smoke.

Max. Tyri. Serm. 21.

Also the *Tbracians*,

See *Pomponius, Mela*

l. 2. *Solimanus*, c. 4.

The *Babilonians*,

Herodotus

l. 1. near the end.

The *Indian Priests*.

fruits of Trees, and drinking in the smoke, that they would sing and dance.

After the same example the *Indian* Priests which they call *Bulgiri*, being in consultation concerning the event of any business, were wont to drink the smoke of Tobacco, to make themselves mad, and to enquire of the Diuel concerning any business; For the *Indians* were not accustomed to make warre, or to undertake any business of consequence, but they would first enquire of the Devill what should be the successe of it, who answered them by the Mouths of those lying Prophets made drunk with the smoke of Tobacco: The Priest being consulted with, did burn the dry Leaves of Tobacco, and he drew the smoke into his mouth by a cane or tunnel, as now a daies our Country Men do too much (the more the pittie) being made so drunk with the smoke, untill he fell fast asleep, being deprived of all his Senses, and being rapt into a certain extasie; he fell down upon the ground, where he lay, most part of the day or night

no-

not able to move; when his drunkenness was over, he told them, he had conferred with the Devil, and as he thought, so he delivered his mind; Whether they should wage warre, or not, or undertake a journey, and so he gave answers for all things they asked him of; yet so doubtfull, that let the event be what it would, he could easily perswade the ignorant multitude, that he fore-told it; and thus he miserably deluded these barbarous people.

The wonderfull craft of the devil amongst the Indians.

Also the *Indian* Physicians made drunk with this smoke, and having lost their senses, would relate a thousand things concerning the counsel of the gods, and then they three or four times rubbed the sick Patients body with their hands. In the mean time they held a bone in their mouth, which the simple women afterwards kept as a relique. Being demanded concerning a disease, they answered all things to be well; if it fell out otherwise, they had their excuse ready, the disease was mortal: and it was a capital crime for them to neglect their ordinary customes. Thus the

The custome of the *Indian* Physicians

the enemy of mankind was wont to deceive the *Gentiles*.

*Johannes
Mucellus.*
It prepares
a Catarrh
in a cold
matter.

In some places the same men were both their Physicians, and their Priests.

But since the Effects of Tobacco are found to be so excellent, I shall discourse of them more particularly.

In Distillations, where a cold matter is the cause, make a Fumigation of the dry leaves of Tobacco. The Syrup of it is excellent, for this will wonderfully stay Defluxions of Rheum. The leaves chewed or bruised in the palate, do the same. These melt the flegme that is in the head, and dry up the cels where the Rheum lieth, by drawing forth the moisture from the foremost ventricles of the brain, by that part which is commonly called the Tunnel. I know not whether there can be a more happy or more certain Remedy found out for this purpose.

For the
memory.

Also to strengthen the memory the smoke is excellent taken by the Nostrils, for it is properly belonging to the brain, and it is easily conveyed
into

into
that
the N
grate
cerni
ken t
it do
clear
not
their
selve
bacco
(wh
min
kno
and
Me
goo
but
fam
ric
unt
exp
of
An
wa
thi
M
rec

into the cels of it, and it cleanseth that from all filth (for the brain is the Metropolis of flegme, as *Hippocrates* teacheth us in his book concerning the Kernels) it must be taken three hours before meat, for so it doth more conveniently discufs and cleanse the peccant humours. I do not write this for their sake, who by their daily miscarriage abuse themselves, and spend good time in Tobacco-shops, and make of their brain (which is the most noble seat of the mind, and the store-house of all knowledge and learning) a chimney, and a common shore, and disgrace a Medicament that is otherwise very good, and make themselves nothing but blowers of coles and ashes. A famous Practitioner at *Leyden* *D. Henricus Florentinus*, sometimes related unto me, that *Dr. Pauvins*, a most experienced and excellent Anatomist of his time, had once a subject for his Anatomical practice, whose smelling was quite lost, and there was not any thing left to be seen of the *Processus Mamillares*: And this he conjectured, by good Arguments, to have happen-

Note.

History 1.

- happened by reason of the parties immoderate drinking of Tobacco. About thirty years since (or before) that smoaking Tobacco through the nose hath been suspected and spoken against, as if the continual and over-
 using of it did fill the brain with all vapours, and last of all did corrupt it. Let us hear what the most learned Dr. *Justus Raphelengius*, who deserved exceeding much amongst Scholars, writ sometimes unto me. His words were these, *I remember* (saith he) *that Dr. Pauvius, in his first Anatomical practices, dissected a strong young man, and otherwise very sound, whose brain was totally filled with black vapours like to soot. D. Pauvius inquiring into the cause of that accident, and referring it to Mania, or some other disease of the head; they answered that were acquainted with that young man, that the man was never sick, nor had he the falling sicknesse, but was so given to drink Tobacco continually, that the pipe was seldom out of his mouth, and he was alwayes drawing in that fuliginous vapour; Whereupon D. Pau-*
 vius

vius did conjecture upon good grounds, that heap of soot and smoke was contracted in the cavities of his brain by that means.

I could alledge many more examples of this kind, but for brevity sake I passe them over. Let these and the like dangerous effects teach thee, that lovest this smoke to avoid them, if thou lovest the truth, and take heed least that sweet Memory, which is the mother of the Muses, and Gods delight, do turn her eyes from thee, and thou be deprived of that divine closet and lights, which are an incomparable treasure, as being unworthy to possess them.

But young men especially must take great care how they suck in this smoke, for the custome and too much use of it, brings their brains out of order, and makes them to be over-hot, so that they lose their good temper, and are beyond the bounds of their health, and that sacred anchor is lost irrecoverably. For the nourishment of young men requires a gentle moisture, to strengthen them, and to make their bodies grow to

The smoke of Tobacco is very hurtful for young mens bodies.

Especially
for the
Cholerick

to their just perfection. Especially for those that are cholerick, whose brains cannot endure excess of heat, for the native heat would be oppressed by the accidental heat. See *Galien* his Comment, in lib. de viſſ. ſalub.

It will
cause vo-
mit.

Also this ſmoke doth vehemently move the ſtomack to nauſeat, and to vomit, (as daily experience teacheth us) namely by cleaving to the inward parts, and ſo offending the peculiar juices contain'd in the ſtomack, and the Meſentary, it deſtroyes their ordinary operations. For in thruſting forth the matter from the ſtomack it cannot be, but alſo ſomething muſt be caſt out, wherein the force of nature reſides; and alſo, becauſe when nature is doing her office, ſhe ſends the nourishment into the habit of the body, as to the circumference, but all diſturbſing and purgative things draw the juyces and ſpirits to the center. Wherefore nature is wonderfully tired with theſe contrary motions, for ſhe can endure nothing leſs than two contrary motions at the ſame time. Wherefore it is a moſt bitter

bitter enemy to the stomacks of very many men, especially if they use to take it presently after Supper or Dinner. And in this respect it is mischievous to the bodies of all sound men, according to *Hippocrates* his Rule. 2. *Aphorif. 37. It is troublesom to purge those that are in good health.* For frequent use of purging Medicaments will soon make a man old; for the forces are broken by the resolving of the solid parts, by an *Hypercatarrhis* of all nutrimental juyce. Also *Celsus* in the beginning of his Book affirms, *That Aliments only are fit for sound bodies, and Physick for those that are sick.* But grant, that it purge not (which yet is most certain, as I shall shew elsewhere) yet it alters the body, which can never be done in young and strong bodies without great hurt. Moreover it drinks up the moisture, and augments the heat of a perfect constitution, as the fire and Sunne do sensibly heat such things as are exposed to them.

Therefore it is an enemy to the stomach.

It alters the body.

Let us hearken to the example of *Plato*, 2. *de legibus*, In the beginning

ning (saith he) I confirm it by a Law, that children untill they come to be eighteen yeer old, shall be wholly ignorant of the use of Wine, and We must admonish them, that We ought not to adde fire to fire, into the body and the soul, untill they become men, and begin to undergoe labour; for We must take heed that young men be not furious in their habit of body, then let them learne to be moderate in drinking Wine, untill they come to be thirty yeares old.

If then *Plato* forbade young men to drink wine, because by its heat it fills their brains with vapours, and with many hot fumes, and over-heats their bodies, and not only hurts the body, but doth exceedingly hurt the soul by the use of it, as *Galen* saith, 1. *Sanitat. tuend.* Wine must not be given to young men, because it makes them prone to anger and to lust, and makes the rational part of the soul dull and out of temper; and doth not the smoke of Tobacco do this farre more? Wine is hot and moist, Tobacco is hotter than wine, and that
excess

exc
and
plac
hea
He
Phil
from
of c
ons,
Fea
brin
chol
quer
destr
and
Mel
tinu
dry
flam
and
also
ing i
nists
that
dainl
saith
from
writ
he m

excess is the cause of its strong smell, and corroding taste: moreover in place of moisture of the Wine, the heat of it is joyned with driness. He that hath only tasted of natural Philosophy, may easily perceive from hence, that it is a thing full of danger for Colerick Constitutions, and disposeth them to burning Feavers, Hecticks, and Frensies, and brings them into unseasonable Melancholy: For the unnatural heat, conquering the natural heat of the body, destroyes and wastes that, as I said, and by the same means ingenders a Melancholy distemper, by the continual use of it. Hence it is, that the dry and hot choler is afterwards inflamed; but this is done by degrees, and insensibly in the younger age, and also by reason of the frequent drinking in of Beer, (for our Tobacco-nists use to do so) and this hinders that the alteration cannot be so suddenly made. *Galen de sanitat. tuend.* saith, *That the best manners, proceed from the best temperament.* And he writ a whole Book for that end, that he might prove the affections of the
E mind,

mind, to follow the temperament of the body. Which thing, though it be principally to be understood of that Original temperament which we received from our Parents : Yet as that is changed either naturally by age, or accidentally by sucking to much smoak of Tobacco, or some other external meanes, so a great change of the affections and inclinations of the mind useth to go along with it; and as heat and acrimony grow and dwell in the blood, so rashness and fury do in the soul.

The Blood being now made thick and congealed, the mind grows stupid and sad; and in some men this is too apparent, though others do prudently dissemble and cover it. Wherefore I cannot see how that overmuch drawing of smoak of Tobacco to the brain and nostrils can be done, but it must overthrow the perfect state of mens bodies and minds, the proportions of the cold elements being subdued, and promoted unto heat; being spoiled of their former condition, and that not only in these smoaky Companions, but
in

in their Posterity also; since the nature and constitutions of the Parents are naturally passed over unto the Children: and withall, the affecti-
 ons of the mind that depend upon them. For saith the learned *Fernelius*, *With what Disease soever the* L. 2. de
Father is troubled when he begets the signis.
Child, the same Disease passeth to
the Child. And *Galen* writes thus: *Lib de can.*
The Father gives the form, nature *sis Morbor.*
and essence to the Child. When
 therefore the Humours of the body
 have contracted this sharp heat and
 driness, by the too much smoaking
 of Tobacco, the Father gets a Son
 like himself; but such an one as wants
 natural moysture, which should
 prolong his life, and should dispose
 him to ingenuous, pleasant and sociable
 manners. Let *Avicenna* speak, *Fen.*
 1. p. c. *It is in the power of Art to*
hinder that corruption shall not breed
in us, and that natural moisture shall
continue longer, that it be not soon
dissolved by drying and burning causes,
and that every body may be made to
hold out so long as it possibly may do
by its natural temperament. And
 E 2 he

he shews afterwards in few words, by what helps Art can perform this; namely, by a three fold Caution laid down by Art. One in a due Administration of Meats and Drinks, in the quantity, quality, substance; manner, order, and measure and time of them: Not neglecting in the meanwhile, the occasion of the place, which is another Caution to take heed of Corruption. The third is in forbidding and forbearing those things, which since they can naturally hurt life, they do in a short time dissolve the radical moisture, and so they cut off life in a moment. Such are watchings, cares, griefs; also the use of things that vehemently heat and dry, whence of necessity at length (for want of convenient food) the natural heat is extinguished, and the native moisture: And so we die by wasting and consuming away. *Galen de Tabes*, saith, that *Tabes* is a Consumption of a living body, by reason of dryness.

What is
Tabes.

By these things mentioned, it is easie to collect, that the smoak of
Tobacco

Tobacco shortneth mens daies. For being that our native heat is like to a flame, which continually feeds up- on natural moisture, as a Lamp lighted, drinks up the Oyl by its heat; it follows necessarily, that for want of food, life must needs fly away quickly, when the proper subject of life is dissipated and consumed: for with that moisture, the imbred heat fails also, and death succeeds.

You understand therefore (that are Tobacconists) that the sooty fumes of Tobacco, wherein you are wallowing (as it were) in the deepest mire, are of great force to shorten your daies. *Galen* speaking of opeing Medicaments, asserts, that by the frequent use of them, the solid parts of the body are dried, and that the blood grows gross and clotted, which being burned in the Reines, breed the stone. The same thing may be truly maintained concerning Tobacco, which many use too frequently, and more then any do use those kind of opening Medicaments; for this is more

*1. de Me-
dic simp.
facul.*

Forgetting
God for
smoak.

Commen-
dation of
health.

hot and dry then they are, and therefore is more forcible to hurt sound and well tempered bodies. Take warning therefore you that love Tobacco, that you do not exceed in using too much of it; and enslave your selves to this fuliginous smoak, by hunting after it, and making a god of it. The goods of the body, are beauty, strength, and sound health. The most grave Authour *Plutarch*, commending the last as the best of all, affirmed most gravely and learnedly, That *health is the most divine, and the most excellent property of the body, and a most precious thing.* There is nothing in this world better; nothing more to be desired, and nothing can be found to be more pleasant. *Without this (as Hippocrates saith) there is no pleasure or fruit of any other things.* This is it, which in this life fills all perfection: Without this no man could ever be said to be happy: This farre exceeds the greatest Honours, Treasures, and Riches.

lib. 1. ep. 2. Whence that of *Horace* is a
Sentence

Sentence remarkable.

*Not House nor Land, nor heaps of
Gold or Brasse,
Can force the sick Lords Ague
it overpass :
Nor move cares from his mind ; he
must have health,
Who thinks to use Well What he gets
in Wealth.*

Cicero, who was both the Father and Prince of the Latin Tongue, seems to me, in *L. 2. officiorum*, to set down before all others most excellently, the generall reason of preserving health. Health (saith he) is preserved by knowing a mans own body, and observing those things that do a man good or harm; and by moderate diet of all sorts; and in cloathing to defend the body; and in refraining pleasures, &c. What could be said more divinely, or more fully, or more eloquently by any man, I cannot perceive; for the universal method of maintaining health, is contained in it very elegantly. It is a most worthy Sentence,

The way
to preserve
health.

*Cic. lib 2.
de Senec.*

and fit to be ingraven in the mind of those who are studious of their health. Let us use such things whereby nature is helped and refreshed: Let us beware of such things that we find do us hurt, and that by Nature's direction. *Which (as Cato said) is the most excellent Leader for our life, declaring by many signs, what things she desires, what she abhorres: And to resist Nature, is nothing else, then to do like the Gyants, and to fight against God.* This continence should be observed in all our food, cloathing, and abstaining from pleasures. Continence makes the body cheerfull, healthfull, and firm: And abstaining from pleasures doth the same. For as *Plato* writes, *Pleasure is the bait of mischief.* Since then, they that fume Tobacco, take so much delight and pleasure in it (if that can be called a pleasure) it is a wonder how much they rejoyce, not thinking in the mean time that Nature is debilitated, and they are unmindfull of that Verse of *Ovid*.

*In Philab.
de summo
bono.*

Strange

Strange Poysons under Honeys lib. 1. E-
sweetness lie. lig.

Socrates was wont to perswade *Plat lib. de*
men to avoid those Meats and Drinks *mund. val.*
that would allure men to an appetite,
beyond what would serve to quench
their thirst, and stay their hunger;
because these things, by their delight,
did more entangle us, and bring
great mischiefs upon us. For it is a
true saying,

— *Pleasure that's bought with* Horat. 1.
pain, doth us no good. ep. 13.

And is it not a filthy thing, and ut-
terly to be detested, that man who is
a most prudent creature, should be
ensnared by the wanton enticements
of this smoak of Tobacco, so that
neglecting the precepts of the Art
of health coveting this fordid fume,
he should, wholly devote his health
to it? To be deprived of his sto-
mach? To consume by wasting his
radical moisture? To be tormented
with Feavers, and to be vexed with
many

many other Infirmities? Are not these brave rewards for taking his pleasure? I think with *Galen*, that it were better (if any man have brains in his head) to die a thousand times, then to lead such a life. And if it be so (as I profess it is so) to what end is it for a man to devote himself to these damnable smoaks, and to force nature to destroy and murder her self? Are these things the properties of men, are they not rather of Beasts? *Pliny* writes the

lib. 27. c. 3. the truth: *All creatures that live, know what is good for them, only man doth not.* And *Seneca* is in the right:

Epist. 39. *This is one of the causes of our misfortunes, that we live by Examples, and are not guided by Reason, but follow Custom; and if but few do a thing, we will not imitate them. When many begin to do a thing (as if that were more honest) we willingly follow them, and the Error of the multitude is held to be right by us. And elsewhere; They cannot abstain from Pleasures, that are grown to be a Custom; and in this they are the more miserable, that they proceed so farre,*

Ep. 32.

as to
cessa
pleas
they
great
bapp
filthi
seth
for re
our m
tions

T

On

So

On

To

not, bu
where
the par
much
bound
or whe

as to make things superfluous to be necessary. Wherefore they serve their pleasures, and do not enjoy them; and they love their miseries, which is the greatest misery of all. Then is unhappiness come to the height, when filthiness, not only delights, but pleaseth us; and there remains no place for remedy, when vices are grown to be our manners. But all our Admonitions are in vain.

This Plague infects, and more Juvnal.
Sat. 2.8.
thereto incline,

*One meafeld Hog, Will taint an heard
of Swine.*

*So that all die infected, thus we
see,*

*One rotten Grape, lets not the next
go free.*

To draw to a Conclusion; I deny not, but that for cold and moist bodies where the brain is large, and where the parts are feeble, by reason of too much moisture, and where there is a boundance of flegm joyned with it, or where that juyce offends the brain
with

with a shaking cold: (The sigas whereof are paleness, and no veins to be seen; where the hair stands straight, firm, and are yellow; where they cannot endure cold, and where the temper of the whole body is cold and stiffe; where drowsiness and sleepiness are, and the Mouth, Nostrils, and Eyes, are full of moisture.) this fumigation may be good to empty that sink of naughty and corrupt matter, and to shut it out. Yet I cannot think it safe at all, to take this smoak even in this respect, but with Cautions and Consideration; and the chiefe is, that it be taken for necessity, and not for lust and intemperance: Let there be sparing and modertaion used. But first purge the head with sneezing, with the powder of Tobacco (as I shall say in another place.)

I think the most convenient way is, to make the Pipes you suck it through, very long, such as the *Indians* use, whereby they draw the smoak from a great distance: And I remember, that many were wont to use the like, for the smoak will
come

con
ph
so
tha
ven
wil
pou
but
7
cut
it v
Hea
mae
into
may
they
add
I h
with
thin
mon
the l
V
peo
(w
Figu
conc
Men
Meo

come cooler, and be taken with more pleasure; nor will it reek forth with so foul and sharp fume. Also, since that the brain is enter-woven with very narrow small Veins, it will not willingly entertain those gross vapours that penetrate with difficulty, but only such that are thin and hot.

The *Persians*, and the *Turks* also, cut *Lignum Aloes* small, and mingle it with Tobacco, for Diseases of the Head, and so through a long Pipe, made of Lattone (which they put into cold water, that the smoak may come the cooler to the brain) they draw forth the smoak. Some adde some drops of Oyl of Anniseed, I have seen others mingle Cloves with it, and some again adde other things that evacuate the cold and moist humours of the Head and of the Breast.

What Instruments the barbarous people use, or rather Pipes or Trunks (whereof I shall set down divers Figures at the end of this Discourse concerning Tobacco) of which *Menardus* speaks *Lib. 3. simpl. Medic.* And I cannot use any mans words

What Pipes the barbarous People use.

words better then his own, which the
 most learned *Clusius* hath interpre-
 red to us, and by which the courteous
 Reader may best understand it.
 " There are brought (saith he) from
 " new *Spain*, some Trunks made of
 " the inward part of Canes or Reeds,
 " and smeered with some kind of
 " gum, which I think is mingled
 " with the juyce of Tobacco, for it
 " trieth the head: If I am not
 " mistaken, they annoint the Cane
 " with that; and as it is glutinous, it
 " sticks fast, and is of a black colour.
 " But when it grows hard, it will
 " hold no longer. The Trunk is
 " lighted at that that end where it is
 " smeered with the Gum, or Pitch;
 " and the other end is put into the
 " mouth, and the smoak is received,
 " and this draws all flegme and cor-
 " repr humours out of the Breast.
 " This they are wont to use when
 " they are oppressed with short
 " breath, and are ready to be choaked.
Clusius addes to the same Chapter,
 " That in the year 1585 *Wingande-*
 " *cow* (which is now called *Vir-*
 " *giny*) being discovered to the Eng-
 " lish

lish (to their Captain *Richard*
Grenfield, and is a Province of the
 new world, and is thirty six degrees
 from the *Aequator* toward the
 North Pole) they found that the
 Inhabitants did frequently use some
 Pipes made of Clay, to draw forth
 the fume of Tobacco leaves set on
 fire ; which grew amongst them
 in great quantity, or rather to
 drink it down, to preserve their
 health. The English returning
 from thence, brought the like Pipes
 with them, to drink the smoak of
 Tobacco ; and since that time, the
 use of drinking Tobacco hath so
 much prevailed all *England* over,
 especially amongst the Courtiers,
 that they have caused many such
 like Pipes to be made to drink To-
 bacco with. These are *Clusius*
 words concerning the English. Let
 me adde that great part of the Low-
 Countries, *Germany*, *France*, *Italy*,
Turkie, *Arabia*, *Persia*, and many
 of the Inhabitants of the whole earth,
 (if not the greatest part) are taken
 with the scent of this smoak, that they
 do preferre this stinking and filthy
 smell,

smell, before the most pleasant perfumes that are in the world. But chiefly this fumigation is of great esteem with us in the Low Countries, and the Merchandize of Tobacco prepared, is not the least among other Trafique, and the Merchants make a huge gain by it, if they have but any good fortune. It is a very speedy way, and a vast profit to the Merchants of *Holland* and *Zealand*, who bring Tobacco prepared and dried from the *Indies*, and send it forth to other Countries, be they never so wide off from them, for they gain by it extraordinarily. How many thousands of men may be found in that most flourishing and mighty City for trafique *Amsterdam* (to say nothing of *Rotterdam*, and other Cities in this Province) who at first being but of a small meanes, for the most part, by selling Tobacco, have sustained themselves in their poverty, and also abundantly provided for their Families for food and rayment, and other necessities, and have gained something more for themselves; and there are some that have heaped up
great

Great wealth by it. Yet I do not defend them, who under a specious and faire pretence to gain food and some small matter, by keeping Tobacco shops, (as also others that keep Wine Taverns, tap-houses and the like) do in the mean time increase their estates by keeping Whores and Bawds which they live by. But that the Curious Reader may see how mightily this Merchandise of Tobacco encreaseth amongst the *Dutch*. I say undoubtedly that this may be foreseen and foretold by it, and it must be confessed, maugre all opposition, that the most illustrious and most mighty States of *Holland*, by a small and very tolerable tribute to be paid, imposed by them upon Tobacco, (which I understand was lately done by them) may collect above thirty thousand franks yearly at their pleasure, by the only custome upon Tobacco for the publick treasure, from the Merchants that are carefull to bring it from the *Indies* unto us.

But to return again from whence we digressed. I said that this fume can draw forth watry and cold humours

An Ob-
jection.

The ne-
gative
part.

mours from the head ; yet *Hippocrates* his Doctrine seems to be against this, 5. *Apharism.* 28. *Sweet Aromaticall smells will provoke the terms, and the same would be often good for other matters, did they not cause the head to ache.* Where he teacheth, *Galen* subscribing in his commentary, that the whole body being duly fum- ed, will send forth by the Matrix in all cold and moyst dispositions, were it not that we are affraid of that hea- viness of the head, which proceeds from these fumes. Since then for a *Flegmatique* matter lying in the head, those things are not requisite, which load and fill the head, but rather those things that send ease and ligh- ten it, fumigations that are made of things, that fill the head, as *Galen* himself teacheth, cannot be good to be used in such a disposition of the brain, nor yet in any other.

The affir-
mative
part.

But there are many most grave *Anthours* for the other part, who exercise their practise with great praise, and teach and highly commend fumigations in such, or the like acci- dents, and to these men not only daily experience

experience, but also most strong reason subscribes. For to cut and consume a cold and moyst humours collected in the brain, no fitter Remedies than those can be found, which have power to strengthen, attenuate, and dry the brain, and it is certain that the fume of Tobacco hath such a faculty. For it heats, cuts, attenuates, opens and resolves: Therefore this smoke drawn in by the Mouth and Nose to dry and heat the cold and moyst excrements of the brain, may be proper and usefull.

Reason.

To answer the former argument that is against it, observe that it is very necessary to consider, for the use of this remedy, what the temper of the brain is as I said, and what the humour is that abounds in it, for if it be hot it will be much filled and burdned with the smoke of Tobacco, and the cause of this event lyeth in the heat of the part, (for heat naturally attracts heat) and also in the largeness of the passages of a hot head, whereby it easily admits the Vapours that ascend: but if the braine be over cold and moyst, and then heap

Note.

up such excrements, it will not be filled with this fume, but will rather be refreshed and dried, unless perhaps by reason of so great naturall weakness, or weakness contracted by a disease, it can admit no vapours without pain and heaviness.

Answer to
the opposite
argument.

These things premised, I answer to the contrary Argument, that *Hippocrates* in the quoted Aphorism, must be understood concerning those, who have a brain that is very hot and moist and weak withall, and that easily is offended with pain and heaviness. For a cold and moist brain filled with cold and moist Excrements, a hot and drying fume (such as is the smoke of Tobacco,) is most convenient, especially drawn in by a Pipe the way I mentioned before. Yet I think they ought to abstain from it, whose heads are not only weak, but are also of a delicate nature, and are easily disturbed and pain'd not only with fumes but with the most temperate smells.

Another
question
whether
the smoke

Here follows another question, namely whether the fume of Tobacco swallowed into the Stomach (which custome I find to be in continuall use with

with many men, but chiefly amongst our Sea men) can draw and purge superfluous humours out of the head and brain?

Reasons are very forcible for the affirmative part. The first is taken out of the 7. Aphorisme, 30. of Hippocrates who say thus; *Whosoever they be that in a diarrhaa void frothy excrements by stool, those excrements flow from the head*, and from thence it is inferred that humours may be drawn from the head to the stomach by the faculties of purging medicaments, being derived by the tunnel. The second is taken from *Aetnarius*, *Misnes*, and other approved Authours, who commend Agarick to purge flegmaticque humours contain'd in the head and the brest, which they would never have done, if the head and brest could not be vacuated by the belly.

The Argument for the Negative part is, because according to *Aristo*. 1. *Secl. Probl. Quest. 42.* When medicaments come to the belly, and are resolved, they are presently carried to the Veins by the same way that the meat is, and when they can-

if Tobacco swallowed into the stomach can bring forth superfluous moisture of the Brain.

The affirmative part.

For the negative part.

How
purging is
made.

not be concocted, but remain conquerours, they slip back again, and carry with them those things that stay by them, and that is called purging. And from the stomach to the brain or brest, there are no passages found whereby a purging medicament can passe to allure the humours to it: Therefore the humour that is contain'd in the brain or thorax, cannot be drawn forth by the fume of Tobacco, as by a purgative medicament, which opinion also of *Aristotle* the most Learned *Fernelius*, 3. *Meth.c* 7. seems to defend.

Note therefore for the resolving of this difficulty, that the more corpulent substance of this fume doth not pass from the stomach to purge the brain, but stayeth in it, or sticks in the Intestins, and from thence it draws forth those humours that are agreeing to it, which may be proved many waies. First, because medicaments applied outwardly, as to the Navel, & therefore called [Navel-medicaments, to the palme of the hand, or to the soles of the feet, and sometimes applied to the Nostrils will purge the
body

body, and yet they cannot proceed so far as to purge the humours. Secondly, Because we often observe that medicaments and pills are voided almost whole, after purgation, which could not be if they passed all the body over, to draw unto them such humours as are familiar to them. Thirdly, *Serapiows* argument proves the same, for saith he, if a medicament should pass to a humour, that is farre off from it, it would joyn lovingly with it, and would never draw forth that it delights in the society of; as the Loadstone joyaed to the Iron, doth not draw the iron to some other place, but detains and holds it there. Wherefore we must confesse that some thin fume substance doth rise from the stomach, by the veins and other secret passages, not only to the brain, but also is diffused, we cannot say how, to all parts of the body.

Hence it is clear, that *Aristotle* said not right, that purgatives pass all the body over, and so draw the peccant humour, as taken captive into the stomach.

Aristotles
reason
confuted.

The question decided.

Those things being thus observed we answer to the difficulty, that purgatives do not pass through the body to attract humours that agree with them, but they stay in the stomach, and by their force and Vertue they draw them unto them from all parts of the body by waies, that though they are unknown to us, yet they are not unknown to nature.

Another question whether the Brain can be dried, or other parts of the body remaining in mediocrity. The negative part.

Here riseth another question, Namely, whether to much Drinking of Tobacco in a Pipe, can dry the brain, and yet leave the other parts of the body in a good temper?

For the Negative part, the Argument is this; Because the great or small quantity of the humour of the whole body, follows the temperament contracted from the first generation. Since therefore the temperament belongs to the whole living Creature, and not to one part alone, the humour cannot be dried up in the brain nor in any other part of the body, but it must also be dried up in the whole body.

Now that the temperament must be ascribed to the whole body, and not,

not
the
Ep
shar
hai
tem
eith
not
boe

2.
pr
is
the
the
ra
eq
th
fer
ju
ve
la
th
he
y
o
(
n
b

not to one part only, is proved from the 1. and 3. Books of *Hippocrates Epidem.* From the grayness of the eyes, sharpness of the voyce, and black haire, you may conclude that the temperament of the whole body is either hot or cold; as if one part could not be hot or cold, but the whole body must be so also.

But *Galen* is for the contrary part, The contrary part. 2. *de temper. c. ult.* where he proves by many arguments, that it is not necessary that all the parts of the body should follow the temper of the whole. For though in a temperate body and very well constituted an equall temper may be found over all the body, but in others that are different from this exquisite temper and just dispensation, it cannot be Universally true; for a man may have a large brest and full of haire, and therefore like a Lion have a most hot heart, and be exceeding bold; yet it follows not that all his body over must be so hot. So we find daily (to pass by other examples) that many men have hot livers, and yet cold brains, and the contrary in others,

G

that

that it is no wonder that if one man who hath the rest of his veins of his body swelling forth, have the veins of his head and brain after a sort dried up. For *Galen* addes that this may be done, and that the excess of Intemperance in one part, may be the cause of the contrary excess in the rest, and make them weak, or the strength of one part may be answered by the strength or weakeness of another.

Answer to
the argu-
ment con-
trary.

To answer the contrary argument; when *Hippocrates* collects from the colour of the eye or sharpness of the voice, what is the temperament of the whole body, this may be taken, as if he did search for the same things in the equall temperament of the whole body, whereof he finds some tokens in the parts; or he may be understood thus, when other signs in the whole body concur to signifie the same. For example, if there be signs of heat in the whole body, and a great voyce and large brest be joyned with them, it is evident by these signs that the whole body is hot: which must also be understoode concerning the complexion of the brain, and other parts,
that

That must be compared with the temperament of the rest. I say that such who for many years and by much taking of it are used to this smoke in their mouth and nostrills, to those it doth less harm, *For custome is nature acquired*, as *Galen* saith, 2. *de natu musc.* and 2 *de tempament*, or it is an acquired habit, by many actions concerning one thing used for a long time; and this habit by custome is made agreeable to nature. Whence divine *Hippocrates*, 2. *Apborism.* 50. speaks thus. *Those things that we are accustomed to, though they be worse; yet they do us less harm, than those that we are not used to, and therefore we must use what we are wonted to.* This is a most true axiome and cannot be contradicted; For all things that are accustomed, as they are so, are less hurtfull than things we are not wonted to: for by custome things that are worse are made familiar to nature, and therefore are not dangerous. For what nature is acquainted with, is wont to be harmless. Custome is of such consequence, that from that in preserving of health or curing of

Custome,
what?

1.

2.

diseases we may have great indication, and not much less than we can from nature, as both *Hippocrates* and *Galen* intimate in many places. For since nature alwaies delights in what it is used to, (as *Galen* saith, 8. *Method.*) it is certain that every one ought to keep his custome: for from custome as well as from nature and age, great conclusions may be made. Since then *Hippocrates* and *Galen* affirme that we must hold to what we are wonted to; what a great danger would it be to leave off this custome which is confirmed by so many years, as this is to smoke Tobacco, in a Pipe at the Mouth and Nostrils, and to change this to a contrary way, especially if it be done suddenly or immediately, as I am perswaded all men can easily perceive? Whence *Celsus* also speaks, l. 1. c. 3. *He is in danger who both once, and he that twice eats in a day contrary to his usuall custome? Again, sudden ease from violent labour, and sudden labour from great ease cannot be safe.* When therefore any man thinks to leave off this drinking of Tobacco for a time, he must
not

not rashly nor suddenly change this custome, for it is almost as strong as nature. Therefore they who use to smoke it, easily bear it, and they that are not used to it cannot so well away with it. Custome makes not only healthfull things to be usefull for us, but also it makes those things healthfull, which were they not accustomed to us, would be the most dangerous. For it is of such force that it overcomes the malignity of any thing taken, and which is more to be wondred at, the very violence and virulency of poysons is conquered by it, and it spoils them of their malignity; so I read of a maid that was fed with Wolfs-bane, and in time by degrees shee used it for her nourishment, *Galen*, 3. *simpl.* c. 18. speaks of an old woman of *Athens*, who beginning from a small quantity of Hemlock, proceeding by degrees learned to feed on it in great quantity and found no harm by it. We read also of a certain Maiden at *Colen*, who when she was but three years old would catch the Spiders creeping

Avicen. 6.
4. tr. l. c. 1.

Galen 1.
11. c. 13.

creeping upon the walls and eat them, and being delighted with that kind of diet grew exceedingly;

Plini. l. 29. c. 2. *Mithridates* King of *Pontus* taking poyson daily, made it so familiar to him, that when he would

Martiall, l. 5. 17. have poysoned himselfe, that he might not fall into *Pompeys* hands, he drank deadly poyson without any harme.

*Oft Mithridates eating Poyson got,
That the most cruell Poysons hurt him
not.*

Sleydan, lib. 9. Writes, that Pope *Clement* the 7. being old, died of a great pain of his stomach, having changed his diet by the advice of *Curtius* his Physician. What should I say much of a thing confirmed of daily examples. We see that they who use to purge often have need of stronger physick than what they used to take before: for those that are usual wil hardly move them. So if one often take Clysters, the belly will hardly be moved, nor yet yield to other remedies, as it befell the Duke of *Albanie*, who could not go to stool without a Clyster, for nature

nature had forgot her self, and depended wholly upon Physick. He that will read more concerning custome, let him read what

*Heurn. in
meth. ad
prax. l. 3.
c. 17.*

Theophrastus l. 9. c. 18.

concerning the History
of Plants, hath writ-
ten of *Thracia*
and *Eudemi-
us Chius.*

* * *

FINIS.

Dr Everard.

D

EN

T



Ve
sing
side
Phy
stor
fore
few
won
sinc



D^r EVERARD
 HIS
 DISCOURSE
 Of the Wonderfull
 EFFECTS & OPERATION
 O F
 TOBACCO.

I Am chiefly induced to write the History of Tobacco, a most excellent Plant, and for Physicall use, of admirable Vertue, because many have written singularly well of Plants; yet besides *Nicolaus Monardus* a Spanish Physician (who writ a peculiar History of Plants and Spices brought forth of the new found World) very few have sufficiently set forth the worth of this noble Plant. But since, I doubt not but that many
 H earnestly

The Wonderfull

earnestly desire to know the Effects of it, that such may no longer be kept from their Enjoyments, as they know it by Name, they shall farther know the Vertues thereof. I willingly undertake this work, that I may as briefly and faithfully as I can, publish to the world, what I have partly got by reading, and by the relation of other men, and what I have had experience of my self, adding what others have scattered in their writings here and there, and what I have since by long study herein, approved to be effectuell.

The
kind.

Tobacco in the form and faculties of it is much like to *Comfrey*, that I may not without reason think it to be of that kind, rather then a yellow *Henbane*, as some have supposed.

The dif-
ferences.

It is observed to be of three sorts, the Male, the Female, and a third sort, more imperfect then them both.

Descripti-
on of the
Male.

The Male hath large leaves, that are thick, long, fat, of a watry green colour, sharp at the top, a little hairy, and clammy, but with no cuts
in

in them; so sticking to the stalk, that they seem in a manner to embrace it: They smell strong, taste sharp and hot, and are larger at the top, then at the bottom; It produceth a most upright stalk, which sometimes riseth to four or five foot high, and sometimes to some Yards, as the ground is hotter, that it is planted in, and is fatter and well dressed.

The branches that from the knots at a distance spring forth, part the stalk a foot, or half a foot distance asunder. In the top of the branches a flower comes forth, that is white and red which they call a Carnation colour, like a small bell, and it comes out of a Pod as out of a Cup, which at length swelling round like to an Apple, when the flower witheres, is filled with very small seeds, very like to the yellow *Henbane*, which being ripe or black, but first they are green. At the root there is great plenty of syowrs, which doth after a sort renew it self, whereas the roots are but small threds, some greater and shorter then others, as the Plant is in height. They yeeld as the leaves do,

The branches.

The Root.

a fat and rofine juyce, that is yellow, and smells like Rosin, not unpleasant, and the taste is sharp and biting. The most flourishing Plants have thicker and woody roots, which exceedingly abound with shoots of a yellow colour, bitter in taste, which are supposed to be equall to *Rheubarbe* in Vertue, though this be not sufficiently found out.

The Female hath a smaller and lower stalk, the leaves are shorter, smaller and not so gummy. The flower is not so open and gaping, nor so ruddy a colour: The branches are not so tall nor stretcht forth as the Male *Tobacco* branches are; wherefore they are out exceedingly that think this to be a kind of *Satyrinum*.

Descripti-
on of the
Female.

For this which we call Female *Tobacco*, is not like to *Satyrinum* either in form, fashion, root, colour or any other way. For it hath many small roots, a hairy stalk, many branches, many leaves, and those long and large; and it is hot and dry, like to the Male *Tobacco*: but *Satyrinum* hath fewer and thicker roots, the stalk is not knotty, it hath no branches

branches, it hath fewer leaves, the flower appears on the top of the stalk, without any Pod or seeds, and is hot and moist to the third degree, and is most fit to provoke lust.

The third sort of *Tobacco* is in all things smaller, the leaf is rounder, somewhat blackish, fat, somewhat hairy, though it be full of juyce: The flower is less, and round on the outside, and of a pale colour, and it is not above twenty years since it was known in *Europe*. *Dodonæus* called it yellow *Henbane*, but *Mathiæus* before him called it black *Henbane*.

The third sort of Tobacco called commonly black or yellow, *Henbane*.

It is sowed about the Calends, Ides, or Nones of *Aprill*, or near that time: sometimes sooner or later, as the weather is hot; though the *Indians* in *Peru*, and the Inhabitants of new *Spain*, sow it in *Autumn*. In hot Countries it bears leaves, flowers, and buds at one and the self same time, for nine or ten Moneths together. But in the low Countries it flowers from *August* untill Winter, and forthwith brings forth seed; after that, when the frost first comes, it fadeth

The time.

and quite decays, and it can hardly be kept all the Winter, unless it be in Pots or Baskets, and that in Stoves, or Store-houses, or other places that are kept hot.

The
Lore
Ticc.

This requires a fat and well manured ground, and in their cold Countries, the ground must be exceedingly well dung'd, and the dung, (especially Horse-dung) must be so mingled with it, and incorporated, that it may seem to degenerate altogether into the Earth. Moreover it requires a shadowed and moist ground, and it must be large, and affording room enough: For where the place is narrow, it will not prosper nor yeeld any branches. It delights in a South Sun, and where there is a wall or sluice behind it, that it may be thereby defended from the injuries of the North winds that follow, and that the Sun-beams lighting upon the wall, may reflect upon it. It must be free from all Tempests, because it is exceeding tender, and very great; yet when it hath taken deep root, it hath almost escaped the danger of winds. It wondrously delights

delights in water, and therefore being oft-times watered, especially where the Climate is very hot, it thrives the better. It can endure no cold, and therefore in winter it must be preserved in hollow places, and where Chimneys or Stoves are provided for this purpose. Or else it must be compassed about with a double Mat, and a Painthouse upon the wall over it, and a coverlid raised up, and it must be covered with a covering of straw, in a shelter that lieth right against the Sun at noon day shining clear, that the Plant may be refreshed by the heat.

Before you sow it, you must make a hole in the earth with your finger, and casting into that hole ten or twelve grains, you shall diligently cover them with the same earth. But do not cast in three or four grains into a hole, for they would be choaked being so small. If the Climate be very hot, you must water them for fifteen daies after you have sowed them; also they may be sowed as Lettice seed, and other seed of that kind: namely by curiously mingling

The way
of sowing
it.

the earth and heaping of it together. Some there are who mingle the most pure and fine Ashes with the earth, but a very little, for it grows very gently and slowly. When it comes up, it must be accurately defended against all injuries of cold and frost, and in the night chiefly it must be covered when it grows up: and thus it will for ever keep its native vigour and splendour uncorrupted.

Trans-
plan-
ta-
tion.

When the Plant is grown a foot high, because all the grains severally bring forth their stalks, and the fibres of the roots stick together, and are in a manner glewed, you must cut the earth round about with your Knife, and cut the turf round, and then take up the earth, and cast it into a bucket full of water, that the earth may the sooner be separated, and the small stalks may swim on the top. These you must take severally whole, and wrapping them up in their own earth, you must transplant into a ground that is well dunged, some three or four foot off from the wall, but somewhat deep, that the stalk may grow the stronger. But if the
the

the Earth neer the wall or fence be unfruitfull, you must help this barrenness by trans-planting the stalks and by diligent watering of them.

Nicotiana took its name from 70. The *bannes Nicotius*, by whose direction name. it first was made known to the *French*: as also many Plants and Stalks bear the names of Men both amongst the *Greeks* and *Latins*, who by their care and study brought them into their own Countries, and Planted them there, where they were unknown before. This *Nicotius* Counsellour to the *French King*, being in the Years 1559. and 1560. Embassadour for his *King*, in *Portingall*, and was minded on a day to go to see the Castle at *Lisborn*; A certain Noble Man of the Low Countries shewed unto him this sorrain Plant, and gave it him freely; saying, he brought it from *Florida*. *Nicotius* accepted it and took great care to have it set and maintained in his Garden, and to be propagated, untill being grown up, it shewd forth wonderfull miracles of the faculties it had.

Thus it began to be esteemed much
at

The Embassadours Plant.

at *Lisborn*, and to be called the Embassadours Herb. But because it was sent from *Nicotius* to *Francis* the second King of *France*, and to the *Queen* Mother, and to some of the principall Countries, some called it the *Queens* Plant of *Medicea*, and honoured it with that name; for shee gave it to divers to be Planted and to be made increase all *France* over.

The prior Plant,

Some called it also the Plant of the great *Prior*, because he sometimes passing from *France* into *Portugal*, and being entertained by the Embassadour, and Feasted, received of him many of these Plants, by way of gift, and setting them in his Garden, he took great care to make them grow there above all the rest.

Petum. Tobacco.

The *Spaniards* call it *Petum* and Tobacco, from the name of the *Island* wherein it was first found, where it grows in abundance, and thence it got the name.

Picicelt, the Herb of the holy Crofs.

The *Indians* that inhabit there call it *Picicelt*; The most illustrious *Cardinall* of *Santa Cruce*, being the *Popes Nuncio*, for the Church of *Rome*

Rome into *Portingall*, brought it first from thence to *Rome*, and therefore there it was called the Herb of *Santa Cruce*. Many call it the holy or sacred Plant, by reason of the divine and strange Vertues and forces of it. Many again call it *Petum* the Male, to distinguish it from the Female, and that is the most proper and native name of it, that the Inhabitants of *Florida* use to give it, from whom it came to us.

Yet it is fit and reasonable, that we should call it *Nicotiana*, in regard of the Honourable memory of the foresaid Embassadour *Nicotius*, who first endowed *France* with so excellent and divine a Plant.

Whence it is called *Nicotiana*.

The Second kind of Tobacco, as I said, is to be called the Female Tobacco, for experience the Mistress of all things teacheth us that it comes next to Male Tobacco, in form, root, and seed; and more then that, because it often grows from the seed, of the Male Tobacco. For if it chance that any of the seed of the Male Tobacco, when it is full of Seed, fall to the ground, Namely, the

Female *Petum*.

the same ground where Tobacco grew before, doubtless the next year Female Tobacco will grow in that very place. And if you sow the Male Tobacco Seed upon ground, that is not hot enough, but if barren and sandy; In place of the Male, it will bring forth the Female, and in such abundance, that it will be hard to root it out of that place, but it will every year grow in of it self; and this is an Argument that there is a double sex in Tobacco, as it falls out in most Plants, where there is an affinity betwixt them.

The tempera-
ment
of Tobacco,
Male
and Fe-
male.

By its Rosiny smell, not unpleasant, and it's sharp and biting tast, it seems to be hot above the Second degree, and dry in the First, being very fit to Clense, Resolve, and Consolidate, and for this it is miraculously effectuell; for because by its Smoake it sometimes makes men drunke, that doth not prove it to be a sort of *Henbane*, though it be very like it, both by the Leaves, Cups, Stalks and Seed; for it is not credible it will do it so soon as *Henbane*, nor is it the effect of extreame cold; but by the
Aromaticall

Aromaticall Vapour, that proceeds from it, which fill the cels of the brain.

But the temperament of the Third sort of Tobacco, or rather night-shade yellow or black, is cold and moist.

If you consider the effect of Tobacco, the Leaves are the principall, and next the Seed, though the Seed be farre below them. The Leaves must be used either green when they are ripe, or else dried, and in Winter brought to powder, for they are of the same force, as the juyce of the Leaves is. The way to dry them is this; run a threed through the fairest Leaves of Tobacco, and those that are moderately large, and hang them in the shade, in the rooof of a Chamber, where neither the Sun, nor Fire, nor Wind may come at them. Others shew us another way to keep them any time of the year. Put the dry Leaves of Tobacco into a Viol full of Oyl of Olives; and when you will use them, power off the Oyl, and wiping the Leavs with a thin Linnen Cloth, use them as if they were now gathered.

Further,

The use
and ef-
fects.

It takes a-
way wea-
riness.

Further, Amongest the effects of it this seems chiefly to be wonderfull. The *West-Indians* and the Inhabitants of *Peru* and *Florida* use this to take away weariness, and to make them chearfull of their work, and saith *Nicolaus Monardus*, we found that by their example our servants and the *Moors* that come strangers into the *West-Indians*, used to do the same. for when they are weary and tired with many leapings, and danceings, they draw this Herb in by their Mouthes and Nostrils, and so the same thing befalls them, that doth the *Indians*; for about three or four houres they seem as if they were dead; after this they are well refreshed, and more able and chearfull to work, then they were before: And they take such pleasure in this, that sometimes they will go out of sight, that they may the more freely take it though they be not weary. Yea, they grow so mad, that sometimes they are therefore punished for it by their Masters, who also take care that their Tobacco may be burnt, that so they may take from themall occasion of this pleasure.

pleasure. What need more words? The juyce
I saw, saith *Nicholam Monardus*, of Tobacco
both the Servants and *Moors*, that co makes
were not suffered to make themselves one drunk
drunk with Wine, to drink the
juyce of Tobacco, and make them-
selves drunk, wherein they take not
small pleasure, and they boast that it
takes away wearinesse from them.

It is also as strange and wonderfull A fume
that the Inhabitants of *Florida* at from the
some set times of the year, will feed dried
on the smoke only of this Plant, leaves of
which they suck into their Mouths Tobacco.
by horns made for this use. The
Marriners are sufficient witnesses,
and many more that newly returned
from *Florida*, and more are daily
coming back, who having some
things like horns or tunnels, tide about
their necks, made of Palm tree leaves,
are much delighted with Reeds or
Canes, in the ends whereof these
Leaves are fastned in Bundles, when
they are grown dry, and withered.
Then put lighted Coles to the more
narrow part of the Tunnel, and draw
with open mouth the fume that is
raised, as much as they can, and they
swear

swear and maintaine it, that hunger and thirst is thereby abated, their Strength is restored, their Spirits are cheared, and their Braine is comforted with a kind of pleasant Drunkenesse, and the superfluous Humours of it are consumed, and an incredible quantity of Flegmatique Humours are drawn into their mouths.

To stay
hunger
and thirst.

Like to these, is that which the said *Monardus* left in writing in his own Spanish Language: *The Indians* (saith he) use Tobacco to stay hunger and thirst, and to drive it away for some daies, that they may not need to eat or drink when they have cause to go abroad into Woods and Desarts, and inhospitable places where meat and drink can hardly be got. For they chew the leaves, and mingle them with powder of great Cockle shels, and these they hold in their mouthes together, untill they come to a Mass, and of that they make Trochisks so great as Pears, which being dried in the shade, when occasion is, they use after this manner. They put this pellet under their lips and fore-teeth, and suck it as they travell; and having

ving sucked it all, they swallow it down instead of meat and drink, and fill their stomach. By this means they will fast for three or four daies, and lose no strength, preserving (as I think) their native heat by the plenty of slegm which being sucked into the mouth, is swallowed down with it; and the stomach for want of better juyce, turns it into nourishment. To these things I shall adde what the most famous Physician to the Emperour, *Rombertus Dodoneus* a great Scholar, and who deserved much for his great skill in Plants, reports in his late History of Plants. I understand by the relation of my Friend (saith he) that drinking the juyce of this Plant about four or five Ounces in weight, their belly is mightily troubled, and they purge up and down, after that they fall into a long and deep sleep. There was a Countrey man that was strong, of a middle age, who had a Dropsy, and he took this juyce, and he when he awakened demanded for meat and drink, and after that he was well. He relates also, that he cured many Countrey-men of Agues with the

A History for the Dropsy.

I distilled

distilled water of all leaues of Tobacco, drunk a little before his fit come. But with the powder or the dry stalks and rubbish, he soon cured gullings, not only of men but of horses and other creatures. These are Dodonius his words.

For Diseases of the Head.

Cataracts.

Head-ach.

But to come more particularly to the Effects of Tobacco. First of all the powder of the leaues of Tobacco, finely beaten and sifted, and blown into both Nostrils in the morning through a Quill, is good against Cataracts, and all defluxions upon the eyes, and for pains and giddiness of the head, if these proceed from a cold cause. It purgeth all Humours that trouble the head, marvellously, like to an Errhine or nose-Purge, and diverts them, so we use it in the morning for some daies, the body being well purged before.

The paines of the head, legs, arms coming of wind or cold, abate, if you lay on one of Tobacco leaues green, roasted on the fire, upon the part; If you want green leaues, use those that are dry, which you must moisten in Wine, and lay under hot embers,

bers, then sprinkling them with water of *Naptha*, they will be applied happily to the part. You may do as much with the powder of the leaves dried, mingling such things as are proper for these Diseases. But you must repeat the cure so often untill the pain be gone. In Convulsions and such like Diseases, the leaves of Tobacco will do good, if they be laid to the nape of the Neck.

Carolus Clusius affirms, that Dimness, the distilled water is good for clouds of the eyes, to discuss them, and to preserve the sight, if you often wipe the eyes with it warm.

It cures deafness, especially from Deafness, a cold cause, if you drop in one drop of the oyl or juyce warm, into the ears, for some daies together.

Doctor *Monardus* writes, that he Ozena, saw a man, who for a long time, had Ulcers in his Nostrils, from whence there ran much fretting matter, and filth that eat his Nostrils; but at length, when by his advice he snuff up the juyce of Tobacco into his Nostrils, first he hawked up above

twenty small worms, then greater, untill there were none remaining; so that the inward Ulcers of his Nostrils (you would have thought it a kind of *Polypus*) were cured, but the parts corroded and eaten up were not to be repaired, and so it had been with all the rest, had he not had the Physicians advice.

Redness
of the
face.

The juyce and oymntment of Tobacco takes away the redness of the face, if you dip a fine rag in it, and apply it to the cheek-bones; Annoynting with the oyl doth the same, or washing with the water of it.

Tooth-
ach.

A little leaf of Tobacco wrapt up into a lump, be it a green or a dry leaf, and this held in the mouth (but the teeth must be first rubbed clean with a linnen cloath wet in the juyce of Tobacco) doth presently ease the pain of the teeth, coming from cold or wind, and takes away all corruption: but this remedy is nothing worth, if the pain proceed from a hot cause: Also it is good to rub aking teeth with the distilled water of Tobacco.

To cure the Thrush and Ulcers of
the

the Gums, a mixture is made with The Ul-
Honey of Roses, and the juyce of cers and
four Pomgranats, which maundifies, sores of
scoures, and breeds flesh, the Gums

The leaves of Tobacco roasted Swelling
under the hot embers applyed to the of the
pained part, ease the pains of the Throat
Throat over-cooled by rheume, and from
all other Diseases of the body pro- Rheuma
ceeding from cold causes. And a
gargarism may be made of the de-
coction of this Herb alone, or ming-
led with other Herbs, proper for this
Disease.

It wonderfully helps Diseases of Diseases
the brest, and those that spit bloody of the
matter. Also for short breath, and Thorax.
other inveterate Diseases, if a de- Short
coction of it be made with Sugar, Wind,
and the Stomach being first purged,
it be taken for some daies together.
So the leaves of Tobacco, boyled in
water and Sugar put to the de-
coction: Or rather juyce of the
leaves pressed forth, and boyled in-
to a syrrup, Apozeme or Julep, taken
daily upon an empty stomach, two
or three ounces at a time, abates the An old
difficulty of breathing, and an old Cough.

cough. It brings forth thick, clammy, corrupt humours; but the sick must be first well purged, and generally his body must be well emptied by Physick. Also a Syrrup may be made of other pectoral means, adding the leaves of Tobacco to them, or Liquorish, Reasins, Jubbues, Figges, Prunes, Dates, and Herbs fit for this use; as Maydenhair, Scabious, Horehound; and the like.

Take Maydenhairs white and black, Horehound, Coltsfoot, of each one handfull; Tobacco leaves two or three, Reasins without stones, whole Barley of each one Pugill; Liquorish scraped two drammes; make a decoction to a pint, sweeten it with Sugar and Honey what is sufficient.

Another that attenuates and cuts more: Take Scabious, Horehound, Maydenhairs, Wall-Rue. of each one handfull and half, Figgs ten, Reasins one ounce; Tobacco leaves five, Liquorish scraped two drammes; make a decoction in a pound of Horned water, untill two parts be consumed;

sumed; Adde to the strained Liquor of simple Oxy-mel, Syrrup of Maydenhair, of each two ounces, Oxy-mel compound one ounce, mingle them.

Water of Tobacco, with Eybright water, drank daily upon an empty stomach, doth the same; as Doctor Jarnacm Goverour of *Rochel* hath proved, who was an intimate acquaintance of *Nicotium*, and private to the counsels and busineses of the French King, and whom he chiefly desired to communicate the Knowledge of this Plant to. This man being at a Banquet of the Kings, with the Embassodour, professed that by this means he cured one of an Asthma. I (saith *Nicolaus Adnardus*) observed some men (troubled with an Asthma, returning from the West-Indies or from Peru) chewing Tobacco leaves in their mouths, and swallowing the juyce of them, to make them spit forth corrupt matter: but though these men were drunk by it, it appears they found much good by it, to bring out matter and stegm that stuck in their stomachs.

Use of the
powder of
Tobacco.

The dry powder of Tobbacco performs the same, if you hold as much of it as you can take between the top of your fore-finger and thumb, at the root of your tongue, near your palate (taking care that you swallow not the powder) for in a short space you shall perceive great plenty of flegmaticque humours to run forth at your mouth, and this will endure untill that you may fill a small dish with flegme. When you think this watry humour is come forth in sufficient quantity, wash your mouth with some good white Wine: Do this every morning upon an empty stomach. If this be so troublesome, do it every third day, alwaies according to art, premising universals.

Stomach
pain.

The same way it is profitable for the Diseases of the Brest, and the parts adjoyning, as the Lungs, Wesand, Throat, offended by afflux of humours.

It is wonderfull good for pains proceeding from a defluxion of humours upon the mouth of the stomach, or bred there; and for all
old

old paines of it, or preternatural long-during paines of the Reins, and for contractions of parts, from chronical and lasting Diseases, to chew the powder of dry leaves of Tobacco in the mouth, to make an Apophlegmatism with them.

The women of the *West-Indies* Crudities. mightily commend the leaves of Tobacco, because they take away the crudities of the stomachs of young and old; and dispell winds, restore concoction, soften the belly, if it be first annointed with oyl of Olives; and the leaves being made hot under hot embers, be applyed to the region of the belly, and be renewed as oft as occasion is: The ashes must not be wiped off, but more must be laid on to make it more effectual.

Also, if you lay the said leaves so Surfeit. prepared, to one that is surfeitted with meat or drink, you shall very much remove his Crapula, and repletion. The same reason serves for the powder of the dry Herb, if you put so much of it as you can hold between your finger and thumb, into a spoonfull or two of *Aqua vite* when

when you go to bed: For it takes away your surfet, and makes you sleep, and resolves flegm.

Swound-
ing.

They that swound away, presently recover their former strength, if the smoak of the leaves come into their mouthes or nostrils, drawn by a Pipe or Reed.

The Col-
lick.

Tobacco wonderfully helps the torments of the Guts and Belly, and pain of the Colick, and other paines proceeding from wind, or cold, if you lay the leaves on very hot, and change them often, untill the pain abate.

The powder of the leaves dried, is good for the same use, taken in white Wine, or some other liquor when you go to bed, about half a dram or a dram weight, or thereabouts.

The Iliac.

The leaves used the same way, cure the wringing of the small Guts, and it is proper to put this Herb with others in decoctions for Clysters, as also to use them for Plasters and Fomentations, that will do great service,

For Example, take Mercury, Rue, Marsh-Mallows, Little Centaury,
of

of each one handfull; Hyſop, Calamint, Wormwood, of each one handfull and an half; Tobacco leaves ſix, roots of Maſh-mallows half an ounce; Linſeed, Fenegreek, of each three drams; Cumminſeed, Annifeed, of each one dram and half: let them boyl in ſufficient quantity of water, untill the third part be conſumed, then take of the liquor boild and ſtrained, one pound; *Hiera-Picra*, half an ounce, *Benedicta Laxativa*, ſix drams; freſh Butter, Honey of Roſes ſtrained, of each ſix drams; Oyl of Roe and Dill, of each one ounce and half; common Salt one dram: Mingle them all, and make a Clyſter. The Li-

If Tobacco leaves be diſtilled with Fumitory, it wonderfully helps all Diſeaſes of the Liver: But obſerve, you muſt take leſſe quantity of Fumitory then of Tobacco.

The joyce of the leaves of Tobacco, bruised with a little Vineger, or the Oyntment of them rubbed in the morning upon the place of the Spleen obſtructed or hardened, from a cold cauſe, ſoftneth and diſſolveth it; but after anointing, you muſt apply

The
Spleen.

ply a leaf to it roasted in the embers, or a cloath wet in the juyce of the leaves. Others use instead of this, unguents proper to this Disease with which they mingle the juyce of the leaves, and adde also the leaves themselves; and by this means it is found out, that hard and inveterate humours may be dissolved.

The
Dropic.

The distilled water drank daily upon an empty stomach, wonderfully helps hydrophical persons. Moreover, if you put the dry leaves of Tobacco upon the live Coles in a Kettle, and so roste them, and draw in the smoke of them by your mouth, with a Pipe or Reed, or Tunnell, having your head and throat close covered, you shall spit out so much flegme, and clammy humours, that you shall be so lank, as if you had fasted a long time. Wherefore it seems that a Dropsy not yet confirmed may be cured by this fume, since it chiefly doth good to Asthmaticall short-winded people, and such as are vexed with an old cold, and with Rhumes; for it makes them to spit out much thick and clammy matter.

The

The juyce of the Leaves of Tobacco Clarified, and with Sugar made into a Syrup, and taken in the Morning in a small quantity, drives forth Stomack and Belly Worms; yet you must bruise the Leaves and wrap them in a Cloth, and lay them to the Navel of the Patient, and give him a Clyster of Milk and Sugar.

Worms.

Also the powder of the same alone or mingled with other Lenitives, is a present remedy for the Emrods: for it perfectly cures them.

Emrods.

The Leaves heat under the Embers as I shewed before, do with no less force drive away pains of the Matrix, if they be laid to the Navell, but it must be first Annoynted with Oyle wherein the juyce of the Leaves is boyled. But the suffocation of the Matrix is taken away, by receiving the fume of the Leaves by the privities.

The Womb.

Hip Gout is abated, if you rub it with Oyle of Olives, and apply one Lease of Tobacco Rosted at the fire.

Suffocation of the Matrix.

Sciatica.

This is good for any Gout coming from Cold; Some bid the Patient chew

chew

chew every Morning fasting some of
 the Leaves, to free him from pains of
 the Gout. This will draw much
 Flegme into his Mouth, and hinder
 it from running down upon the lower
 parts. Wherefore the powder of
 the dried Leaves will preserve men
 from pains of the Gout of the Feet
 that came at certain times, if they use
 to Snuff up this Powder often into
 both Nostrils. Likewise they that
 are now in pain with it, shall mani-
 festly find an abatement of it, and the
 Disease to decline, if they Snuff up
 the Powder into their Noses, and in
 time often using it they will be freed
 from it. Also the Powder may be
 held in the Mouth instead of an Apo-
 phlegmatism: for either way it draws
 much Humours from the head, and
 directs them from falling down upon
 the parts affected, by reason of De-
 fluxions.

Lastly, The fresh Leaves of To-
 bacco, laid on hot to resolve the cold
 are good for any part of the body af-
 fected from a cold cause: for they
 take away the pains, and forcibly re-
 solve them; either applied by them-
 selves,

Itself, or with other Remedies, good for the same Diseases, where there needs strong resolving means.

Take *Sagapenum*, *Adelium*, *Grialslowy*, of each one Dram; dissolve them in Vinegar, and about the end adde of the Leaves of powder of Tobacco dried one ounce, Oyle of Camomile one ounce, wax what is sufficient; make a Plaister according to art, for this most powerfully resolves, and abates pain; Also you may make it thus:

Take *Tacamahac*, *Caranna*, of each three Drams; dissolve them according to art, in Wine, or a little of the strongest Vinegar; after this adde powder of Tobacco six Drams, Oyle of Lillies, and of Wall-Flowers, five Drams, wax what is sufficient, make an Em-plaister according to art.

To these adde Tumours, Impo-
stumes, Inflation, and Childrens kibe
heels, or any sort of Itch; for the
Leaves of Tobacco laid to them, or
the juyce warm, with Rags, or Lint
wet therein cure them, for they re-
solve the Humours and ease the
pains.

Tumours;
Impo-
stumes,
Kibes.

To

To cure Kibes, the part affected must be Annoynted with the ioyce, and be rubed with Linnen Raggs; but first, putting the Feet or Hands, if the cold be in them, into very hot water, wherein you have put a little Salt, for this is often proved to do good.

For Burns. It is tried that Tobacco will cure Burns; A certain drunken Companion had a Glas of Beer in his hand, and he stumbling, and loth to break the Glas, fell into the fire and burned his hand. Women laid their heads together, and they after an howre or two, laid on some Clay. This did no way ease the pain, for he could not sleep by day nor by night, wherefore being no longer able to endure the pain, he comes to a Matron of *Antwerp*, and asks her advice, who, as he had heard, knew the Vertues of Tobacco. Shee strewing the brims of the burnt place, with the powder of Tobacco, attempted to help him, but for three daies little good was done by it. When therefore he grew inpatient, he murmured at the Woman secretly, because he came to her

her to be cured, and Shee went to make experiment of the Vertues of Tobacco upon him, and he commanded that such Medicaments as are gentle should be applied: but the pain being nothing lessened with this, he comes back to the Matron, desiring her to go on with the cure as Shee began, and Shee (as Shee was a very good Woman) strewed the Powder on again, and in three daies made him well.

Moreover, for inveterate Wounds, malignant cancerous and spreading Ulcers, Scabs, *Noli me tangere*, Itch, Tetters, Scrophula's, Bubo's, Impostumes, fleshy Excrescences, and the like almost innumerable Diseases, it is very effectually, if the juyce be applied with rags or lint.

Old Wounds, Scabs, malignant and cancerous Ulcers, Tetters, Scrophulus.

Green Wounds, if they are not too deep, are cured in one day, by the juyce of the Leves and Lint. But if the Wound be very deep, it may be washed with Wine, and be bound with bands wet in the juyce. And it is excellent to heal a Wound quickly, to wash it with the juyce of the Leaves, the Inflammation being over.

Green Wounds.

Not long after that the Embassadour came to have the knowledg of Tobacco at *Lisbon*, one of his Cooks had almost cut off his whole Thumb; the Steward presently runs for Tobacco, which being sometimes applied to the Wound, the Cook was well cured; And thus this Herb grew to be so much esteemed at *Lisborn*, where the Court then was, and it began to be called the Embassadours Herb. It is as good for contusions and all hurts, to which nothing else useth to be applied besides the juyce with Rags, and the part affected must be swathed with a Roller. But diet must be chiefly observed, and if need be, the Patient must be well purged, and this is often proved good.

Flux of
Blood.

Tobacco hath notable force to stay blood running forth immoderately from a Wound, or from the Nostrils, or from any hurt, only applying the juyce with with Lint to the Wounds, but the juyce must be snuffed up into the Nostrils, or the Powder must be drawn into the Nose by a Cane or Tunnell.

To cleanse and heal foul Ulcers of
the

the French Pox, and in dainty people; especially if the part that is Ulcerated be of exquisite feeling, the decoction of Tobacco in a Gargarism is very effectually, or mingled with other things. Such a remedy you find in the small Book of *Julius Palmarius*, concerning contagious Diseases; Take two pugils of whole Barley, Agrimony, Tobacco, Plantane, Chick-Weed, Red Roses, of each one Handfull, boyl all in foure Pounds of water to three Pounds, and straine it, then mingle with it Honey of Roses, and Syrup of dried Roses, of each three Ounces, burnt Allum, burnt Vitrioll, of each half a Dram; This Remedy is very abstergent and drying, and cures Ulcers.

Sordid
Ulcer of
the Pox.

The falling off the hair of the head, old corrupt Ulcers of the Arms, Legs, & other parts, and ready to Gangreen, are by this brought to Cicatrize if they be first washt in white wine or Urine, and wiped with a wet Cloth, with one or two green Leaves of Tobacco bruised, and be made moist with the juyce of it, which may also be used alone, and bound on with a Swath of

Old ul-
cers.

Linnen; this being continued for some daies, makes them perfectly well. If green Leaves be wanting, strew upon the Leaves the Powder of the dried Herb, but the Patient must first be Purged by the Physician, and if need be, a Vein must be opened, and a good Diet observed. Yet let no man be dismayed, if he see the Sore grow bigger by degrees; for so all faulty flesh is consumed, and good flesh will come in the place, without Chyrurgery or use of any other Medicament.

A speck on
the Face,
Ulcerated

A certain Noble Man, who was Father to one of the Embassadours Pages, hearing the report of this Plant, came to *Lisbon*, he had an eating Ulcer upon his Leg for two whole years, when he had for ten or twelve daies used the Plant as the Embassadour directed him, he was well cured and returned home.

A certain young Man had a foule eating Ulcer hard to be cured upon one of his Cheeks, and it began to seaze upon the gristle of his nose. He first made triall of this Herb, without the Embassadours knowledge, wherefore

fore applying Lint with the juyce of the Leaves to the Ulcers, he found incredible help by it. Which when the Embassadour understood by another of his Pages Kinsman to the other that was in this Case, he called the young Man to him, and he observing for eight daies the same way of cure, rooted a *Nolime tangere* quite out; but in the mean while that he was curing of him, -he sent him to the chiefest Physician of the King of *Portugall*, that he should set down the order of his cure; and he being eight daies after called for by the Embassadour to look upon his sore face, he professed openly that the *Nolime tangere* was quite killed and dead, and it was more clearly known by that, because the young Man complained not any more of a pain of his Cheek.

A Woman had a horrible Tetter in her Face, you would think Shee Painted, and Shee was cured in eight daies by help of Tobacco, and departed home, giving great thanks to the Embassadour before abundance of People.

It will not be impertinent to adde

one Memorable example which *Monardus* relates in his book of simple Medicaments, brought from the new found World. A Matron saith he that had the charge of a Knights Daughter of *Spain*, remembring what I had said concerning the Vertues of Tobacco in the audience of many People, undertook to cure the Child committed to her Charge, (whose Head was overrun with a foule Scall, and to whom I and others had applied many Remedies in vain) with Tobacco, which Shee fetched of me, nor did Shee loose her Labour. For when Shee had rubbed the Scab so sharply with Tobacco Leaves, that for pain the Child fainted often away the same day, the day following, not regarding her crying or pains, Shee rubbed the Leaves on again, untill such time as the Scals falling off by degrees, the Girls was cured, yet when Shee saw the Scals fall, Shee rubbed her Head something more gently.

For Scrophulas

A Captain of Souldiers, who had a Sonne miserably afflicted with the Kings Evill, was resolved to send him

him into *France*, (because the common opinion is that none but the King of *France* can cure that Disease) this Captain came to the Embassadour, who made tryall of Tobacco in this case, and in a very few daies, he cured the Boy of his Disease; The way of cure is this. Apply Lint wet in the juyce of Tobacco, taken from the bruised Leaves, but do it nine or ten times.

If a man apply the juyce of Tobacco or Lint wet in it, or the green Leaves bruised with his hands, to any part of the body stung with Nettles, he shall presently perceive the pain gone, and the part cured.

For the
stinging of
Nettles.

It is good to cure Warts, if you lay the juyce with Lint upon the Wart, making first an open place in it with your Pen-knife untill the Blood come, or else Annoynt the place only with Unguent of Tobacco, this I know to be true; and may be it may do the same to Corns that grow upon the joynts of the Feet.

Warts.

Corns.

So also the juyce of Tobacco applied to any pestilent Carbuncle is a present Remedy.

A Plague,
Carbuncle.

Veno-
mous
stings and
bites of
mad dogs.

Also used the same way, it is good for Venomous Stings, Pricks, and Bites. So it heals the Bitings of Mad Dogs, if it be applied presently in a quarter of an Houre after the bite is given.

Poysoned
Weapons.

It is good also for the *Indians* called the *Carybes*; for it is a singular Antidote for the venomous weapons of their Enemies. For when they go to Warre they carry with them two hoofs of hearts, in one of them there is a present Venome, which so soon as it Wounds but the skin, that it may come at the Blood, it brings present death: but in the other they carry the juyce of Tobacco, and applying this, they are freed from Death, as experience Witnesseth: If they have no green Tobacco, they use the dry, or beaten into Powder. The *Carybes Indians*, in the Province of *Savina*, Were the first that ever made triall of this, when in a Battle they were many Wounded and Killed. For when as they were wont, to cured venomd Wounds with Sublimate, for want of that they used the juyce of Tobacco pressed

Against
Poyson.

sed forth of the leaves, and this presently took away the pain, and made them well; tryal hath been often made of this in *Spain*.

Moreover, the leaves and juyce of Tobacco, applyed with lint, cures all hurts that befall brut Beasts; and kill the worms in foul Ulcers, and all creeping Ulcers, like as sublimate doth.

Also this cures hard flesh, growing upon the legs of Cattle, and Pack-horses, whose backs are galled with burdens and Pack-saddles, or if they be more hurt, though the wound or wounds encline to a Cancer; only apply the leaves or juyce with lint, or use the dried Herb. They will be so well cured without any other Medicament, that you need not to forbear your Journey.

Hurts of
Horses or
other
Beasts by
galling.

Tobacco is an Antidote against Hellebore. The Hunters of *Spain* are wont to use Hellebore, because it is a present poyson to kill Deer, and wild Beasts. The Catholick King to try the truth of it, bad a Hunter to hurt a little Dog in the throat, and to put Hellborne into the wound, and by

Against
Hellebore

An Experiment of a Dog by and by after, the juyce of Tobacco upon lint, and so to bind all Dog poy- up, and the Dog received no harm, soned to the wonder of them all.

An Experiment for Venome. The like happened last Winter at *Antwerp*, where one gave to a Cat, of a Matron of the Town, a Bolus mingled with venome, because the Cat was so fierce. After this, the Cat could stay no where, but ran up and down, and tryed in vain to vomit up the poyson; the Matron observing this, found a way to open the Cats mouth, and to thrust in a little Ball of Tobacco, made up with butter: The Cat presently after, cast up the poyson and escaped death.

The use of Female Tobacco. Thus much for Male Tobacco; but the use and faculties of the Female, are almost the same as of the Male: and when the Male is wanting, we used the Female (as I have directed you before for the Male) to cure by.

To cure Breasts with Cancers. Observe this, that the leaves of the Female Tobacco are good in decoctions for Clysters: They are excellent against Dysenteries, and the Balsam

Balsam of it yeelded to no Medicament to cure a Cancer, especially of the Brefts.

The third sort of Tobacco, which some call black, others yellow Henbane, is contrary to Tobacco in nature and qualities, and therefore they do ill, that foolishly use it for the true Tobacco. Yet it may serve to revulse hot humours, and in part to resolve hot Impostumes; also in a Cancer it may restrain the heat of black choler. *Johan. de vigo. capite de hernia*, useth Henbane to resolve humours. *It is strange* (saith *Monardus lib. 3. of simple Medicaments, that are brought out of the new world*) what notable vertues and faculties are daily discovered in Tobacco: For besides those related, I can (saith he) relate as many more, which I have heard others speak of, and I my self have observed

The third
sort of
Tobacco.

The juyce pressed out of the fresh leaves of Tobacco, and drank the quantity of two ounces, vehemently purgeth water and flegme above and beneath, and therefore it is profitably given in Dropsies and the Falling-sickness.

The forces of the
juyce of
Tobacco.

Also

The di-
stilled wa-
ter,

Also, water is distilled from the leaves of Tobacco cut in pieces, in a glass Limbeck, which is afterwards rectified in the Sun. This is almost as good as the juyce of the Plant, chiefly for Wounds, Tumours, Kibes, and for nails that fall off from the fingers of themselves, if the water be but poured into the part affected, or now and then a lint or cloath wet in it and applyed.

Leo Suavins bids us gather the leaves in *July*, bruise them, and distill them in a double Vessel with glass Instruments, presently set it in the Sun, and keep it a year.

This water taken fasting, the quantity of an ounce or an ounce and half, is good for an Asthma, and an old cold.

Oyl by
Infusion.

The Oyl by infusion is thus made. Take the leaves torn or cut in pieces, boyl them in Oyl Olives, which will be coloured; press it for h rejecting the leaves: then infuse fresh leaves, and expose them to the Sun in a Viol-glass, or boyl them untill the juyce be consumed; this is good against Scabs, Wounds, and Ulcers: It cures
pains

pains of the head, and foulness of the skin.

Also, Oyl may be drawn from the Seeds of Tobacco, which drank in a small quantity, is excellent against venome and bites of Vipers.

Oyl of the Seeds.

Distilled Oyl is made by descent (as the Chymists call it) is a Glass retort.

Oyl distilled.

Salt is made by the Art of Chymistry from Tobacco, and both of these, namely the Oyl distilled, and the Salt far exceed the leaves or juyce, the powder, or distilled water, to cure Diseases; because the most thin and excellent essences of it, are separated, which are better then the terrestriall matter; for these are the next and immediate seat and subject of the faculties themselves. Let no man despise or scornfully laugh at the name of Essence; for Galen used it, explaining the thing very fitly. For I understand nothing else then he doth, when he saith, that *some Herbs are of a more thick, thin, or fiery nature and essence then others are.*

The way to make Salt of it.

Jacobus Gehorinus of Paris, shews the way to make Salt of Tobacco, Thus.

The first
way.

thus. Calcins Tobacco, dissolve the Calx, strain, filtrat, evaporate it; there will be a Salt which will do no harm in a Caustick, and not so Corrosive in dissolving malignant Ulcers; wherefore this is the common way to extract Salt from all Vegetables. Burn the Herb in the fire, the place being swept clean with Brooms (some first set it in the Sun, others dry it in the shade) let it burn untill it stick together in a lump : Or if you proceed further to burn it, to burn it to ashes, you shall have more Salt. Put the ashes into a glazed earthen Pot, and pour fair water upon them, and let it seeth some hours at the fire; pour it forth into another Vessell, and when the dregs are settled, strain it through a linnen cloath; set the strained liquour at an easie fire with few Coles, that the water may evaporate, and the Salt remain in the bottom.

Another
way.

The next way is more curious. Burn the dried Herb in an earthen Pot covered, by a long and strong fire, untill the ashes come to be pure white, and that is a sign it is perfectly

ly

ly calcined: then let it boyl in Rain or distilled water in a Glass vessell, in sifted ashes; let it boyl untill a fourth part of the water be wasted, then let it stand a while: Pour it into another Glass, and putting in some new very fine Tongues to filter it, the pure and salt water will be strained into the Receiver underneath it. What is filtrated, must be evaporated at an easie fire, in a Glass Vessell, and the salt will remain at the bottom clear and pure.

The third way is the most exact: The third Gather the Herb green, and bruise it, way. distill the water of it by a Limbeck, calcine the faeces at a moderate fire, the Vessell being stoppt, untill they come to ashes. Let the fire be gentle, that it may not consume the proper and radical moisture of the Plant, for that will make it run to glass; pour the water upon the earth of it, and it will thirstily devoure it: Digest it in Horse dung, or in a Bath some daies. Pour it out as before, that it be not mingled with the faeces, then filtrate it, lastly evaporate what is filtrated. These are the various waies

to make artificial Salt, not only of Tobacco, but of all Vegetables that are prepared by the fire, and the use of them may be wonderfull in curing those that are dainty, and such as abhorre all Medicaments, putting that Salt in their Broth, or Salt-seller to season their meat.

Compound
water.

To this may be referred what the famous Physician and Philosopher of his age *Leonardus Fioravantis* hath witten in his *Physicall Observations*. I took (saith he) Tobacco, with Seed and Root, and I stamped them all; the leaves weighed *LIV* ounces, I hid them in Horse dung to ferment thirty daies, and that they might not corrupt, I put some salt to them, and six ounces of aqua vitæ; then I distilled them in *Balneo Mariæ*, untill all the moisture were drawn from them, and that it might keep the better; I added so much Oyl of Brimstone as might make it taste sharp. I used this composition in many things. In all Feavers, a Spoonfull drank cured them: Wounded men, if they drank it, or annointed their wounds with it, they were cured to admiration.

Oynt-

Oyntments are made of Tobacco divers waies, though the Herb used by it self is far more effectuell.

Take the fairest, greatest, greenest most resinny leaves of Tobacco, freed from all filth and dust diligently, that are no waies wet with Rain or Dew, one pound; bruise them with a Pestle in a Morter of Marble, or of Wood; half a pound of Hogs-grease prepared, that is purged from all its skins, and melted in a brazen Vessell: to this must be added the juyce of Tobacco, and the thick substance bruised: Let them boyl together upon a Trevot in a brazen Pot, with a very small gentle fire, namely live Coles being put under the Trevot, or else in Balneo, untill you see the watryness of the juyce to be vanished and gone, and the unguent brought to a Consistence. Or an unguent may be made of the manifold infusion of Tobacco, in Oyl of Roses, three or four times renewing the leaves in Balneo; and when you press it out, adding so much of the juyce of the same Herb, and wax what may suffice, and make an unguent

Oyntment
of Tobac-
co

Otherwise

L accor-

according to art. Or thus,

Otherwise Take juyce of Tobacco, one pound, common Oyl, new Wax, Rosin of the Pine-Tree, of each two ounces; Oyl of S^t Johns Wort, one ounce: Let them boyl at a gentle fire for three hours; strain it, and adde to it two ounces of Turpentine. Boyl them to the consistence of an unguent. It is good for old Ulcers of the Pox, Scrophulas, Ulcers or Spots contracted by the fire in Winter. Kibes, chaps of the hands; especially if you rub the part affected first with the green Herb, and put it into hot salt water. and after anoint it with the said unguent.

Otherwise Take Pitch, Rosin, new Wax, Turpentine, of each three ounces. Let them melt and boyl together in a brass Vessell with live Coles under it; when all are melted and boyl'd, then adde of the juyce of Tobacco and bruised substance, one pound; let all boyl together five or six hours at an easy fire, upon a Tripod in a double Vessell, that is a Kettle full of boyling water: move them constantly, untill all the watryness be consumed, and the

the rest be thickned to an unguent; then press them out through a thick hempen cloath, and put them again into the brass Skillet, adding half an ounce of Venice-Turpentine yet let them not boyl, but stirre them carefully, then let them cool, and keep them for use.

Take leaves of Tobacco bruised, *Otherwise* one pound; Yellow Wax, Turpentine, Oyl Olives, Pitch, white Rosin, of each three ounces: Let them boyl together two hours in a new Pipkin, to the consistence of an unguent, then use it in a small quantity, spread on leather or linnin.

Some there are that in both descriptions do not adde the juyce of Tobacco with the thick substance, but they only strain it, and crush it through a thick cloath; and they reserve the juyce alone, which is not the best way. But the first unguent is far more effectual for Wounds, cancerous Uleers, Tetters, Itch, Knots upon the face; because it hath a greater force to resolve and cleanse away, which is the property of Tobacco, if it be not hindered by other

L 2

things

things that are joyned with it. The latter is better to heal wounds, and repair flesh; to resolve Impostumes, to ease paines, and such like Operations.

But it seems needless to *Jacobus Gohorinus*, to adde new Wax, Rosin, common Oyl, Turpentine; because one of these is sufficient for the clamminess of Tobacco. For such an heap of Simples that are in that Oyntment, make the Oyntment only fit for Wounds, which otherwise is good for cancerous Ulcers, Itch, Imposthumes, Tettors, and other Maladies. It is no reason also, so to waste the juyce of Tobacco, that nothing should remain besides the bruised substance, and strange Ingredients.

Another
against
Wounds
with Gun-
shot.

It will not be amiss to set down an unguent to cure wounds made with Gun-shot, and fit for all other purposes; the proper making whereof is taught by *Josephus Quercetanus*. Take the juyce of Tobacco, one pound, Turpentine five ounces; compound Oyl of St Johns Wort, eight ounces; the best white Wine,
half

half a pound; let these digest for eight daies: afterwards, boyl them untill the Wine be consumed, then adde *Colophania*, Wax, of each three ounces; Mummie, Amber, of each two drams; melt them again at the fire, and make an unguent according to Art.

Jacobus Weckerus teacheth to make an unguent against the Scabs, thus: Take the juyce of Tobacco, one ounce and half; powdred Brimstone, Salt, of each one ounce; Oyl of Tobacco, Oranges, of each two ounces; Oyl of Wax, Goats suet, of each two ounces; make an unguent according to art.

Another
for the
Scabs.
Another
for
Wounds,

Jacobus Weckerus saith, That he received another unguent from a Frenchman to cure wounds. Take juyce of Tobacco, one pound; new Wax, Pitch, Rosin, common Oyl, of each two ounces; boyl all together untill the juyce be consumed, then adde Venice Turpentine, three ounces; strain all through a linnen cloath, and keep it in a Box. This cures Wounds and Ulcers certainly. Adde to all this, that a most fragrant

Balsam of
Tobacco.

Balsam is compounded of Tobacco ; Take as many leaves of Tobacco as you please, bruise them in a Mortar, and press forth the juyce ; cast away the gross body , and set the juyce with an equall part of Oyl of Olives in a glass Viol in the Sun for a long time ; stop the glass close with Gums and Wax, and fasten it with a sound skin of leather : Or if you like it best, set it in a Kettle full of boyling water, or in Balneo, or hide it in Horse dung , and leave it there full forty daies, renewing the dung sometimes; when the forty daies are ended, you shall find a Balsam in the Glass, no less effectual for all Causes, then the Quintessence of Tobacco it self.

Another
for wounds
of Gun-
shot.

Quercetanus describes another kind of Balsam for Wounds made by Gun-shot, after this manner. Take the glewy substance of Tobacco and Comfry, of each four ounces; Oyl Turpentine, one pound; Flowers of St Johns Wort, and Mallou's, of each two handfuls; Elm-tree, Aples, three ounces; of the poplar buds, four ounces; Spirit of Wine, one pound and half: Digest them in Horse-dung,
or

or leave them in a hot stove, in a glass Vessel, well stopt for a whole moneth; then press them, and strain them forth: Adde Frankincense, Mastich, Myrrhe, of each two ounces; Dragons Blood, half an ounce; Mummie six ounces, Turpentine half a pound, Benivio one ounce. Circulate them together in a Pellicane for eight daies, then distill of the Spirit of Wine, at a moderate fire, and there will remain in the bottom a most precious Balsam.

* * *

F I N I S.



*Courteous Reader, These
Books following are Prin-
ted and Sould by Simon
Miller, at the Starre
in S^t Pauls Church-
yard.*

Small Folio.

<p>DOCTOR <i>Lightfoot</i> his Harmony on the New Testa- ment, which will shortly be re-printed with large Additi- ons.</p> <p>The Civill Warres</p>	<p>of <i>Spain</i> in the Reign of <i>Charles</i> the fifth, Emperour of <i>Ger- many</i>, and King of that Nation, wherein our late unhappy differences are paral- leled in many particu- lars.</p>
---	--

Star in St Pauls Church-yard.

A general History of *Scotland*, from the year 767. to the death of King *James*, containing the principal Revolutions and Transactions of Church and State, with Political Observations, and reflections upon the same: by *David Hume* of *Godscroft*.

The History of this Iron Age.

Mr *Paul Baine* on the *Ephesians*.

The Queen of *Arragon*, a Play: In *fol.*

In *Quarto large*.

Jo. Barklay his

Argenis, Translated by Sir *Robert le Grise* Knight, by his Late Majesties Special Command.

Quarto Small.

Abraham's Faith, or the good Old Religion, proving the Doctrine of the Church of *England* to be the only true Faith of Gods Elect: By *John Nicholson* Minister of the Gospel.

The Anatomy of Mortality: By *George Street*.

Three Treatises:
1. The Conversion of *Nineveh* touching Prayer

Books Sold at the

Prayer and Fasting.
2. Gods Trumpet
sounding to Repen-
tance. 3. Sovereign
preservative againk
distrustfull Thoughts
and Cares: By *Will.*
Attosall Minister of
Gods Word at *Is-*
field in *Sussex*.

Aynsworth on the
Canticles.

Paul Baine, his
Diocesans Trial.

Gralle againk *Ap-*
polonius.

A Treatise of Civil
Policy, being a clear
Decision of 43 Que-
ries, concerning pre-
rogative, right and
priviledge, in refe-
rence to the su-
pream Prince and
People: By *Samuel*

Rutherford Professor
of Divinity of
St Andrews in *Scot-*
land.

Politick and Mili-
tary Observations of
Civil and Military
Government, con-
taining the Birth, En-
crease, Decay of Mo-
narchies, the carriage
of Princet and Migi-
strates.

Mr Pinchin his Me-
ritorious price of
mans Redemption,
cleared.

Astrology Theolo-
gized, shewing what
nature and influence
the Starres and Pla-
nets have over men,
and how the same
may be diverted and
avoided.

Wells

Star in St Pauls Church-yard.

Wells his Souls Progress. 4°.

Christ Tempted, the Devils Conquered; Being a plain Exposition on the fourth Chapter of St *Matthews* Gospel: By *John Gumbledon* Minister of the Gospel: In 4°.

The Saints Society.

Dr Stoughtons 13 choice Sermons, with his Body of Divinity: In 4°.

The Reasons of the dissenting Brethren concerning the Presbyterian Government, together with the answer of the Assembly of Divines: In 4°.

Camdens Remains.

The Harmonious Consent and Confession of Faith, of all the Protestant Reformed Churches in Christendome: In 4°.

Large Octavo.

Florus Anglicus, with the Lively Effigies of all the Kings and Queens since the Conquest, cut in Brass.

The Reconciler of the Bible, wherein above two thousand seeming Contradictions are fully and plainly Reconciled.

Evidences for Heaven, containing infallible Signs and real Demonstrations for assurance

Books Sould at the


assurance of Salvation, published by *Edm. Calamy* Minister of *Aldermanbury, Lond.*


The Life and Reign of King *Charles* from his Birth to his Death, By *Lambert Wood.*

The Night-Search, the second part: By *H. Mill.* 8^o.

A view of the Jewish Religion, with their Rites, Customes and Ceremonies.

Small Octavo.

 *Ed. Waterhouse* Esq; His Discourse of Piety and Charity.

 *Panacea*, or the Universal Medicine;

being a Discourse of the Admirable Nature and Virtues of Tobacco: By *Dr Everard* and Others.

A view and defence of the Reformation of the Church of *England*, very usefull in these times.

Mr Pet du Moulin, his Antidote against Popery; published on purpose to prevent the Delusions of the Priests and Jesuites who are now very busie amongst us.

Herberts Devotions, or a Companion for a Christian, containing Meditations and Prayers, usefull upon all occasions.

Ovid

Star in St Pauls Church-yard.

Ovid de Ponto, in English.

The Loves of *Clivio* and *Lozio* a Romance.

Mr *Knowles*, his Rudiment of the Hebrew Tongue.

A Book of *Seheams* or *Figures of Heaven*, ready set for every four Minutes of times, and very usefull for all *Astrologers*.

Florus Anglicus, or an exact History of *England*, from the Reign of *William* to the death of the Late King.

Lingua, or the *Combate of the Tongue*, and the five Senses for *superioritie*: a serious Comedy.

The *Spirits Touchstone*; being a clear discovery how a man may certainly know whether he be truly taught by the Spirit of God, or not.

The Poor mans Physician and Chyrurgion.

Physicall Rarities, containing the most choice Receipts in Physick and Chyrurgery, for the cure of all Diseases Incident to mans body: By *R. Williams*. To which is added the *Physical Mathematicks*: By *Hermes, Tres. Magistis*.

The Idol of Clowns, or the Relation of *Wat Tyler's Rebellion*.

The

Books Sould at the

The Christian Moderator, in 3 parts.

The Golden-fleece, or a Discourse of the cloathing of *England*.

Dr *Sibbs* his Divine Meditations.

Vigerius Preceptes of *Idiolismes*. 8^o.

Grotij *Poemata*. 8^o.

Duodecim.

Doctor *Smith's* Practice of Physick.

The Grammar Warre.

Possellius *Apothegmes*.

Fasciculus Florum.

Crasshaw's Visions.

The Juniper Lecture.

Helvicus Colloquies.

The Christian Soldier, his Combate with the three arch-enemies of mankind, the world, the flesh, and the devil.

Hensius de *Crepundis*.

The History of *Russia*, or the Govern- of the Emperour of *Muscovia*, with the manner and fashions of the people of that Countrey.

Drexelin's School of Patience.

Drexelius his right Intention

Star in St Pauls Church-yard.

Intention of every ones Action.	12 ^o .	every day of the Week.	24 ^o .
------------------------------------	-------------------	---------------------------	-------------------

Viginti Quat.

Plays.

The New Testa-
ment.

The Ball.

Chawbut.

The third part of
the Bible.

Conspiracy.

St Richard Baker's
Med. and Prayers for

Obstinate Lady.